

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 0-58				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2016 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name Well File Review				
Contractor Cadmus Group, Inc., The					Specify Section and paragraph of Contract SOW 4.3					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 09/01/2015 To 06/30/2016				
Comments: Work is authorized to begin on September 1, 2015.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:			LOE:					
09/01/2015 To 06/30/2016										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Susan Sharkey <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number 202-564-8789 FAX Number:			
Project Officer Name Nancy Parrotta <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:			
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: FAX Number:			
Contracting Official Name Courtney Stallworth <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 513-487-2002 FAX Number:			

PERFORMANCE WORK STATEMENT
EP-C-15-022
Work Assignment No. 0-58

I. ADMINISTRATIVE:

A. Title: Well File Review in Support of Study of Potential Impacts of Hydraulic Fracturing on Drinking Water Resources Part 6

B. Work Assignment Contracting Officer Representative (WA-COR):

Susan Sharkey
US Environmental Protection Agency
Office of Research and Development
1200 Pennsylvania Avenue, NW (MC:
8104R)
Washington, DC 20460
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sharkey.susan@epa.gov

Alternate Work Assignment Contracting Officer Representative (WA-COR):

Nathan Wiser
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Office of Research and Development
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303-312-6211
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C. Quality Assurance:

Task 1 in this work assignment requires the use of primary and/or secondary data. Collection, use and analysis of data will require development of a Project-specific Quality Assurance Project Plan (PQAPP) analogous to that completed under Contract EP-C-08-015 work assignment 03-58 and revised under Contract EP-C-08-015 work assignments 04-58 and 05-58 consistent with the Agency's Quality Assurance (QA) requirements at the time. The project-specific QA requirements must be addressed in the monthly progress reports as specified under Task 0, below.

D. Background:

The increased use of hydraulic fracturing has allowed commercial development of large reserves of natural gas and oil in the United States over the last decade. This surge in production has accompanying economic, energy security, and certain environmental benefits. However, as the use of hydraulic fracturing has increased, so have concerns about its potential impacts to drinking water resources. As a result, and at the urging of the US Congress, the Agency is currently conducting research to assess the potential pathways and impacts of hydraulic fracturing on US drinking water quality and quantity, known internally as the Hydraulic Fracturing Drinking Water Assessment (HFDWA). A draft HFDWA report was released in June 2015, and a final HFDWA report is anticipated in late 2016.

One of the areas of on-going research supporting the Agency's HFDWA is a detailed review of hydraulically fractured production well information provided by oil and gas operating companies. The history of this research area is described below.

In September 2010, EPA requested information from nine hydraulic fracturing service companies regarding their practices, including the location of all wells for which they provided hydraulic fracturing services during one year. (Details on the request may be found at <http://epa.gov/hfstudy>.) All nine companies provided information to EPA to assist in the study. EPA received a list of approximately 25,000 wells that were hydraulically fractured between 2009 and 2010 as well as the names of the well operators. In August 2011, using a stratified random sampling from the list of wells and their operators reported by the nine hydraulic fracturing service companies, EPA sent a second request to nine oil and gas companies for well file information on 350 of their wells, to which all nine provided responsive information.

Much of the information provided in both the responses to EPA's September 2010 and August 2011 requests have been designated as Confidential Business Information (CBI) under the Toxic Substances Control Act (TSCA). EPA is using the TSCA CBI rules for handling the data. The contractor shall obtain clearance to work with and safely secure TSCA CBI data.

Information obtained from these nine oil and gas companies is being used to produce two reports. The first focuses on well construction and was published in the first half of 2015. The second focuses on the hydraulic fracturing of the wells, including monitoring activities, and is expected to be published in early 2016. Information from these two reports will be incorporated into the final HFDWA report described earlier.

This work assignment follows-up on work begun under Contract EP-C-08-015 work assignments 3-58, 4-58, 5-58, 6-58, 7-58, and 8-58. To the extent that existing contractor work plans are in need of updating, the contractor shall begin work upon receipt of this work assignment.

The contractor shall be required to cooperate, coordinate, and exchange information with other firms to complete the tasks under this work assignment. Under Contract numbers EP-C-10-023 and EP-D-12-050, the EPA has engaged Westat, Inc. to perform statistical analyses related to the well file review. The EPA WA-COR will make arrangements for provision of information from one contractor to the other.

Throughout this work assignment, the contractor shall provide draft and final reports to EPA in electronic and hard copy formats. The contractor shall discuss the computer file formats to be used for statistical analyses, word processing, spreadsheet, database and graphics with the EPA WA COR prior to file preparation.

II. OBJECTIVE:

The contractor shall review and evaluate data and information to support a report based on well file review which will be relied upon when finalizing EPA's Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources.

Additional Relevant Information:

1. Information regarding EPA's activities on the hydraulic fracturing study, including the draft HFDWA report and the first well file review report is available at <http://www2.epa.gov/hfstudy>,

2. The TSCA CBI Protection Manual is found at <http://www.epa.gov/opptintr/pubs/tsca-cbi-protection-manual.pdf>,
3. On-line TSCA CBI training may be accessed at <http://www.epa.gov/opptintr/itc/pubs/tscacbitesting/1.htm>, and
4. EPA will provide the contractor with other information and QAPPs prepared by the coordinating contractors as appropriate.

III. TASK DETAIL:

The contractor shall perform the following tasks:

Task 0 – Work Plan and Monthly Progress Reports Submission

The contractor shall prepare a detailed work plan and budget for the accomplishment of the indicated tasks. The work plan shall include a description of: (a) proposed staff; (b) the number of hours and labor classifications proposed for each task, broken down to task level, to include both prime contractor and subcontractor labor; and (c) a list of deliverables, with due dates and schedule for deliverables.

In addition, the contractor shall prepare a statement indicating that this work assignment is a continuation of Contract EP-C-08-015 work assignment 08-58. The work plan shall explain that collection, use and analysis of data in this work assignment shall follow methods as described in a PQAPP analogous to that completed under Contract EP-C-08-015 work assignment 03-58 and revised under Contract EP-C-08-015 work assignments 04-58 and 05-58, and if necessary the contractor shall develop this PQAPP.

This task also includes monthly progress and financial reports which are to be submitted. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this work assignment. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. The contractor shall immediately notify the COR and WA COR if any changes to the collection and analysis of the data occur and prepare a new supplement to the PQAPP accordingly.

For contractor work plan development purposes, Task 0 may also include weekly telephone conferences between the WA COR and the project manager, each taking approximately one hour to coordinate and confirm task performance.

The tasks under this work assignment do not require the acquisition of “off-site” facilities for conferences and meetings as defined in the IPN 12-05 and the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

Task 1 – Review and Evaluate Oil and Gas Well Files

Under Contract EP-C-08-015 work assignments 3-58, 4-58, 5-58, 6-58, 7-58, and 8-58 there was contract support on a team comprised of EPA personnel and other contractors to review oil and gas well files, some of which contain confidential business information and which is managed

using the procedures found in the TSCA CBI Protection Manual. The overall purpose of the review was to evaluate how well design, construction and operation may impact drinking water resources, particularly with respect to hydraulic fracturing. This work assignment continues that review.

In particular, successful and timely completion of Task 1 requires the contractor to provide staff with experience as a reservoir engineer. A masters or Ph.D. in petroleum engineering is required. Experience working directly with drilling engineers and petroleum geologists is necessary.

In June 2015, EPA issued a report focused on well construction and pathways derived from these operator well files (<http://www2.epa.gov/hfstudy/review-well-operator-files-hydraulically-fractured-oil-and-gas-production-wells-well-design>). Specific subtasks in this work assignment include reviewing and evaluating the oil and gas well files by performing quality assurance analyses, extracting additional well file information to support a second EPA report, and reviewing drafts of a second EPA report.

Subtask A – Support the Second Well File Review Report

- a. Upon receipt of written technical direction, the contractor shall review drafts of the second Well File Review Report for accuracy, style, comprehension, or other attributes as directed by the WA-COR. The contractor shall review up to two (2) drafts.
- b. Upon receipt of written technical direction, the contractor shall review operator well files for other attributes as directed by the WA-COR.

Subtask B - Quality Assurance

- a. The contractor shall provide quality assurance on information and methods used by other team members described in Task 1. This may include review of the methods employed to characterize subsurface lithology and fluids using as many as 150 well file open-hole logs, and nearby (within 50 km) sample results obtained from the U.S. Geological Survey's produced water database (<http://energy.usgs.gov/EnvironmentalAspects/EnvironmentalAspectsofEnergyProductionandUse/ProducedWaters.aspx#3822349-data>). Results of such QA work shall be incorporated into any final contractor report after consulting with the WA-COR to develop appropriate and accurate portrayal of the results of the QA review.

Task 2 – Miscellaneous Data and Information

Frequently, EPA needs data on unanticipated subjects relating to the hydraulic fracturing study's well file review analyzed with a quick turnaround (two weeks from written technical direction). Upon written technical direction, the contractor shall analyze data provided by the WA COR. For planning purposes, the contractor should summarize the data analysis methods and results in a memo no more than three (3) pages in length for up to two (2) data analysis requests. The turnaround for a requested data analysis memo will be two weeks from the date of written technical direction.

IV. Schedule of Deliverables:

TASK No.	DELIVERABLE	DATE DUE TO EPA
0	Workplan and budget	Within twenty (20) days of issuance of work assignment
	Monthly progress and financial reports	Monthly
1.A	Review and Evaluate Oil and Gas Well Files: Support the Second Well File Review Report	As specified by written technical direction
1.B	Review and Evaluate Oil and Gas Well Files: Quality Assurance	As specified by written technical direction
2	Provide results of data analyses	As specified by written technical direction

V. Confidential Business Information

During the course of the work assignment, the contractor shall be prepared to access, use, or evaluate confidential business information (CBI). As such, the contractor shall adhere to EPA's CBI policy and procedures. The contractor shall obtain TSCA CBI security clearance to use CBI information. The contractor shall handle CBI under procedures consistent with TSCA CBI rules, the TSCA CBI Protection Manual, and in accordance with contract requirements and limitations. The contractor shall analyze CBI in accordance with contract requirements and limitations.

VI. Miscellaneous

SOFTWARE APPLICATION FILES AND ACCESSIBILITY

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: <http://www.section508.gov/>

Preferred text format:	MS Word, 8.0 or higher (Office 2003 or higher)
Preferred presentation format:	Power Point, Office 2003 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

TRAVEL

No travel is anticipated under this work assignment. If the need for travel arises, the WACOR will work with the CL COR and the CO to amend this work assignment to allow for travel.

MEETINGS, CONFERENCES, TRAINING EVENTS, AWARD CEREMONIES AND RECEPTIONS

All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, including the form 5170 for all meetings costing more than \$20,000, shall be obtained by the EPA CL COR as needed and provided to the Contracting Officer. Work under conference related activities and expenses shall not occur until this approval is obtained and provided by the EPA CL COR.

CONTRACTOR IDENTIFICATION

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the CO, PO and/or WACOR.

PRINTING

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

VII. Quality Assurance Surveillance Plan

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WA COR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards. Additional project specific quality assurance surveillance plan requirements are identified below.

Performance Requirements	Performance Standards	Surveillance Methods
Performance Standards are applicable to all PWS requirements and will be utilized to determine eligibility for Award Term Options.		
Programmatic Requirement: The contractor shall develop products that are based on best available information and resources.	Programmatic Standard: Outputs are based on best available information and resources; Documentation of sources used, not used, and limitations of available data.	EPA will review all products for conformance with the requirements of the SDWA Amendments, Clean Water Act and other related mandates, including Small Business Regulatory Enforcement Fairness Act 1996 (SBREFA) and Unfunded Mandates Reform Act of 1995 (UMRA).
Cost Control Requirement: The contractor shall perform all work in an efficient and	Cost Control Standard: Implementation of cost control system to monitor and track project	The EPA Project Officer will routinely discuss the work progress and contract level and

cost effective manner, applying cost control measures where practical.	status, that indicate level of budget utilized and forecast remaining budget needs to complete project. The contractor shall notify project COR immediately in cases where issues impact project cost are identified.	work assignment expenditures with the Project Manager. The WA-COR will maintain regular contact with the contractor's designated work assignment /project manager to discuss work assignment progress and expenditures and will review and verify expenditures and technical progress before invoice payments are authorized.
Schedule Requirement The contractor shall provide services and submit deliverables in accordance with approved work assignment milestone and deliverable schedules.	Schedule Standard: Services and deliverables shall be in accordance with schedules stated in each work assignment. Unless amended or modified by an approved EPA action, a deliverable that is received 7-days past the due date, will be considered unsatisfactory performance.	EPA will closely monitor task milestone and deliverable schedules and review the Contract Monthly Progress Reports and any special reporting requirements to compare actual delivery dates to those approved in the work assignment.
Document Development Requirement: The contractor shall provide documents that are technically and factually accurate, and suited to the intended audience.	Document Development Standard: Information to be disseminated by EPA will meet the requirements of OMB's "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity for Information Disseminated by Federal Agencies (67 FR 8451)	The WA-COR will review drafts to assess technical accuracy and editorial quality. The WA-COR will identify all inaccuracies and needed edits and corrections to the contractor in the initial review of draft documents

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 0-58				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2022 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name Well File Review				
Contractor Cadmus Group, Inc., The					Specify Section and paragraph of Contract SOW 4.3					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 09/01/2015 To 06/30/2016				
Comments: The purpose of this amendment 1 to Cadmus (EP-C-15-022) WA 0-58 is to update the QASP to match the contract level QASP. See Attached.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:				
09/01/2015 To 06/30/2022										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Susan Sharkey <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code:			
							Phone Number 202-564-8789			
							FAX Number:			
Project Officer Name Nancy Parrotta <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code:			
							Phone Number: 202-564-5260			
							FAX Number:			
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code:			
							Phone Number:			
							FAX Number:			
Contracting Official Name Courtney Stallworth <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code:			
							Phone Number: 513-487-2002			
							FAX Number:			

Quality Assurance Surveillance Plan
EP-C-15-022 WA 0-58

<u>Performance Requirement</u>	<u>Measureable Performance Standards</u>	<u>Surveillance Methods</u>	<u>Incentives/Disincentives</u>
<u>Programmatic Standard:</u> Outputs are based on best available information and resources; Documentation of sources used, not used, and limitations of available data; Description of methodological choices made both conceptually and in data selection. Assumptions utilized in environmental planning and applying engineering principles are clearly documented.	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	EPA will review all products for conformance with the requirements of the SDWA Amendments, Clean Water Act and other related mandates, including Small Business Regulatory Enforcement Fairness Act 1996 (SBREFA) and Unfunded Mandates Reform Act of 1995 (UMRA).	<p>Two or more work assignments per contract period where the contractor does not meet the measureable performance standard will be considered unsatisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Management.</p> <p>Fewer than two work assignments per contract period where the contractor does not meet the measureable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Management.</p>
<u>Cost Control Standard:</u> Implementation of cost control system to monitor and track project status, that indicate level of budget utilized and forecast remaining budget needs to complete project. The contractor shall notify project COR immediately in cases where issues impact project cost are identified. The contractor shall provide a risk management strategy that identifies specific project element(s) that adversely impact proposed work plan. The risk management strategy shall present impacts if course is continued without mitigation, and solutions to resolve the issue(s). The risk Management Strategy	The contractor shall manage costs to the level of the approved ceiling on each individual WA. The contractor shall notify the EPA WACOR, CL COR, and CO when 75% of the approved funding ceiling for any particular WA is reached. If a contractor fails to manage and control cost, any resultant overrun cannot exceed the total contract obligation for that period.	The EPA CL COR will routinely discuss the work progress and contract level and individual task order expenditures with the Project Manager. The WACOR will maintain regular contact with the Contractor's designated task order manager/project manager to discuss task order progress and expenditures and will review and verify expenditures and technical progress before invoice payments are authorized.	<p>If the contractor does not meet the measurable performance standards per contract period it will be assigned a rating of Unsatisfactory in CPARS under the category of Cost Control.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measureable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the RFP.</p>

Quality Assurance Surveillance Plan
EP-C-15-022 WA 0-58

shall consider process, schedule, prioritization, and cost benefit analysis.			
<p><u>Schedule Standard:</u> Services and deliverables shall be in accordance with schedules stated in each task order. Unless amended or modified by an approved EPA action, a deliverable that is received 7-days past the due date, will be considered unsatisfactory performance.</p>	No more than 15% of all deliverables per WA shall be submitted more than 3 work days past the due date.	EPA will closely monitor task milestone and deliverable schedules and review the Contract Monthly Progress Reports and any special reporting requirements to compare actual delivery dates to those approved in task orders. EPA will notify the contractor when it becomes apparent that an established schedule will not be met.	<p>If the contractor does not meet the measurable performance standards per WA it will be assigned a rating of Unsatisfactory in CPARS under the category of Schedule.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Schedule if the contractor meets the measureable performance standards.</p>
<p><u>Document Development:</u> Documents shall be technically and factually accurate, and suited to the intended audience. The draft version of a document shall meet a standard of no more than 2 typographical and/or grammatical errors per page and require no more than two editorial revisions. Final documents must meet a standard of no more than 2 typographical and/or grammatical errors per document.</p>	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	The WAC will review drafts to assess technical accuracy and editorial quality. The WACOR will identify all inaccuracies and needed edits and corrections to the Contractor in the initial review of draft documents	<p>If the contractor does not meet the measurable performance standards per work assignment it will be assigned a rating of Unsatisfactory in CPARS under the category of Technical (Quality of Product).</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Technical (Quality of Product) if the contractor meets the measureable performance standards.</p>

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 0-62				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2016 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name UIC Primacy and Program Revisi				
Contractor Cadmus Group, Inc., The					Specify Section and paragraph of Contract SOW 4.3					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 09/01/2015 To 06/30/2016				
Comments: Work is authorized to begin September 1, 2015.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:				
09/01/2015 To 06/30/2016										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Lisa McWhirter <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number 202-564-2317 FAX Number:			
Project Officer Name Nancy Parrotta <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:			
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: FAX Number:			
Contracting Official Name Courtney Stallworth <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 513-487-2002 FAX Number:			

PERFORMANCE WORK STATEMENT
Cadmus Contract # EP-C-15-022
Work Assignment# 0-62

I. ADMINISTRATIVE

A. Title: UIC Primacy and Program Revision Support

B. Work Assignment COR (WACOR):

Lisa McWhirter
Office of Ground Water and Drinking
Water (OGWDW)
1200 Pennsylvania Avenue, NW (MC:
4606M)
Washington, DC 20460
202-564-2317
202-564-3754 (fax)
Mcwhirter.lisa@epa.gov

**Alternate Work Assignment COR
(WACOR):**

Robert-Eu Smith
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(OGWDW)
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4606M)
Washington, DC 20460
202-564-3895
202-564-3754 (fax)
smith.robert-eu@epa.gov

C. Quality Assurance

Task 4 for subtasks 4-3 and 4-6 in this work assignment require the use of primary and /or secondary data. Consistent with the Agency's quality assurance (QA) requirements, the contractor must supplement the Contract Level Quality Assurance Project Plan (QAPP), which has been provided by the contractor, to assure the quality of the data used under task(s) 4 for subtask 4-3 and 4-6 of this work assignment. Work on this/these task(s) cannot proceed until the contractor receives notification of the SQAPP approval from the PO via e-mail. The project specific quality assurance requirements must be addressed in the work plan and monthly progress reports as specified under Task 0, below.

D. Background

Part 147 of the Code of Federal Regulations sets forth the applicable Underground Injection Control (UIC) programs for each state, territory, and tribe identified pursuant to the Safe Drinking Water Act (SDWA) as needing a UIC program. These UIC programs are described in Part 147 as either a state-administered program approved by the EPA or a federally-administered program promulgated by the EPA. States can apply for primary enforcement authority for their UIC program(s) under §1422 or §1425 of the SDWA. Approval of a state program is based upon a determination by the Administrator that the programs meet the requirements of §1422 and/or § 1425 of SDWA and the applicable UIC provisions of Parts 124, 144, and 146 of the Code of Federal Regulations (CFR).

While 40 CFR Part 147 identifies the UIC programs and the supporting information, 40 CFR Part 145 lays out the requirements for UIC state program submissions and what the approval, revision and program withdrawal processes are for these programs. Therefore, in order to properly implement and enforce the UIC program, EPA codifies the approvals of state primacy programs and their respective revisions in Part 147. This ensures that the UIC requirements for well classes I, II, III, IV, V, and VI for each state and tribe are federally enforceable.

As of September 7, 2011, states, tribes and territories may also apply for Class VI Primacy. Consistent with the President's CCS Task Force, approving Class VI primacy applications will be a priority. As

states' Class VI primacy applications are approved by the EPA Administrator, the states' Class VI UIC programs will be codified in 40 CFR Part 147.

In addition to UIC primacy and revision applications, states will be requesting EPA approval for aquifer exemptions, which are non-substantial program revisions. These program revisions are approved by letter instead of being approved by rule and codified in Part 147. The State of California is reviewing its Class II program and will be submitting aquifer exemption requests to EPA for review and approval.

This work assignment supports the steps necessary for the contractor to provide support in evaluating a state's (states') Class VI primacy application(s) and/or a state's (states') UIC program revision(s) to be codified in Part 147 as well as non-substantial program revisions that will be approved by letter. These steps include: providing support in evaluating Class VI primacy application(s) and/or UIC §1422 and/or §1425 program revision(s) and aquifer exemption requests from the State of California.

II. OBJECTIVE: The contractor shall support EPA in: 1) Comparing states' §1422 programs (including Class VI); 2) Comparing states' §1425 programs; and 3) Reviewing non-substantial program revisions such as aquifer exemption requests from the State of California.

III. TASK DETAIL

The contractor shall perform the following tasks:

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task shall be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. In addition, the workplan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility/>. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a Supplemental Project Specific Quality Assurance Project Plan (SQAPP) appending the Contract Level Quality Assurance Project Plan (QAPP), noted above, and ensure the quality of secondary data used to complete these tasks. The work plan shall explain when the SQAPP will be submitted based on the specific data requirements of the WA. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs' broken out by the tasks in this WA.

Deliverables: Work plan, Supplemental Project Specific Quality Assurance Project Plan, monthly progress and financial reports.

Task 1: Track Primacy States' UIC program regulations (PWS Sections 1.5 and 4.3)

Under this work assignment, the contractor shall research and track changes to primacy states' UIC program regulations (§1422 and §1425) by noting the year the change is made (e.g., 2012 or 2013) and indicate which states' regulations changed (e.g., Class I, II, III, V, and/or VI as well as public notification

requirements). For planning purposes, this summary report shall be in the form of word document, and shall not exceed ten (10) pages. This summary report shall be delivered to the EPA WACOR in March 2016 and September 2016.

Task 2: Perform comparison of State UIC §1422 Program Regulations (Including Class VI) (PWS Section 4.3)

Subtask 2.1: Research Federal and State SDWA § 1422 UIC Program Regulations (Including Class VI) for up to four (4) states

Under this work assignment, the EPA WACOR will identify up to four (4) state UIC §1422 programs that the contractor shall analyze. Some of these four (4) states may be for Classes I-V and/or Class VI or Class VI only. The contractor shall provide technical support to EPA Headquarters for the following: (1) review the state UIC §1422 program regulation text in 40 CFR Part 147 for those state(s) identified by the EPA WACOR and note the state statutory and regulatory citations codified in Part 147 for each state identified by the EPA WACOR, (2) initiate a web search to locate the state statutes and regulations for each state identified by the EPA WACOR, (3) gather these statutes and regulations electronically for each state identified by the EPA WACOR and deliver to the EPA WACOR. The WACOR will identify up to four (4) state UIC §1422 programs to be analyzed through written technical direction. After receiving written technical direction from the EPA WACOR, the contractor shall deliver electronically a copy of the state(s) UIC statutes and regulations to the EPA WACOR within ten (10) calendar days. The EPA WACOR will review and confirm the use of the state's UIC statutes and regulations for the crosswalk analysis in subtask 2.2 below.

Subtask 2.2: Develop and Perform Comparison of State UIC §1422 Crosswalks (Including Class VI)

Under this work assignment, the contractor shall use the §1422 crosswalk and/or the Class VI crosswalk to perform a detailed comparison of the state's UIC statutes and regulations. These crosswalk templates will be provided to the contractor. The contractor shall note any changes, if any, and/or any differences in the state's statutes and regulations from the federal regulations and include these notes in the crosswalk. For planning purposes, the contractor shall perform a detailed comparison of up to four (4) state UIC §1422 programs that will be identified by the EPA WACOR through written technical direction. After receiving written technical direction, the contractor shall deliver a crosswalk for each of the states identified to the EPA WACOR for review and comment. For planning purposes, the EPA WACOR plans to issue written technical direction for each state (up to four (4)) and will stagger these written technical directions throughout the performance period (e.g., one written technical direction every month or two (2) months). Once the contractor receives written technical direction from the EPA WACOR, the contractor shall have thirty (30) calendar days to deliver the draft crosswalk to the EPA WACOR.

Subtask 2.3: Summarize Findings in Subtask 2.2

Under this work assignment, the contractor shall summarize the major changes in states' regulations and statutes as well as any major differences between the states' regulations and the federal regulations in 40 CFR 124, 144, 146, and, if applicable, 148. The draft summary document shall not exceed five (5) pages and be delivered to the EPA WACOR along with the draft crosswalk. For planning purposes, the contractor shall deliver up to four (4) draft summary documents along with the draft crosswalks to be delivered under subtask 2.2 above.

Task 3: Perform comparison of State UIC §1425 Program Regulations

Subtask 3.1: Research Federal and State SDWA §1425 UIC Program Regulations for up to two (2) states

Under this work assignment, the EPA WACOR will identify up to two (2) state UIC §1425 programs that the contractor shall analyze. The contractor shall provide technical support to EPA Headquarters for the following: (1) review the state UIC §1425 program regulation text in 40 CFR Part 147 for those state(s) identified by the EPA WACOR and note the state statutory and regulatory citations codified in Part 147 for each state identified by the EPA WACOR, (2) initiate a web search to locate the state statutes and regulations for each state identified by the EPA WACOR, (3) gather these statutes and regulations electronically for each state identified by the EPA WACOR and deliver to the EPA WACOR. The WACOR will identify up to two (2) state UIC §1425 programs to be analyzed through technical direction. After receiving technical direction from the EPA WACOR, the contractor shall deliver electronically a copy of the state(s) UIC statutes and regulations to the EPA WACOR within ten (10) calendar days. The EPA WACOR will review and confirm the use of the state's UIC statutes and regulations for the crosswalk analysis in subtask 3.2 below.

Subtask 3.2: Develop and Perform Comparison of State UIC §1425 Crosswalks

Under this work assignment, the contractor shall use the §1425 crosswalk to be provided to the contractor to perform a detailed comparison of the state's UIC statutes and regulations. The contractor shall note any changes, if any, and/or any differences in the state's statutes and regulations from the federal regulations (Guidance 19) and include these notes in the crosswalk. For planning purposes, the contractor shall perform a detailed comparison of up to two (2) state UIC §1425 programs that will be identified by the EPA WACOR through written technical direction. After receiving written technical direction, the contractor shall deliver a draft crosswalk for each of the states identified to the EPA WACOR for review and comment. For planning purposes, the EPA WACOR plans to issue written technical direction for each state (up to two (2)) and will stagger these written technical directions throughout the performance period (e.g., one written technical direction every month or two (2) months). Once the contractor receives technical direction from the EPA WACOR, the contractor shall have thirty (30) calendar days to deliver the crosswalk to the EPA WACOR.

Subtask 3.3: Summarize Findings in Subtask 3.2

Under this work assignment, the contractor shall summarize the major changes in states' regulations and statutes as well as any major differences between the states' regulations and the federal regulations (Guidance 19). The draft summary document shall not exceed five (5) pages and be delivered to the EPA WACOR along with the draft crosswalk. For planning purposes, the contractor shall deliver up to two (2) draft summary documents along with the draft crosswalks to be delivered under subtask 4.2 above.

Task 4: Provide Non-substantial UIC Program Revision Support for Aquifer Exemption Requests from the State of California

The State of California has SDWA §1425 primacy (or primary enforcement authority) for Class II UIC wells and has issued UIC permits for these wells. As part of the permitting process, the State of California is required to determine whether the owner/operator seeking a Class II permit will be injecting into an underground source of drinking water (USDW) as defined by the Safe Drinking Water Act. If the injection will be or currently is in a USDW, the State of California must submit an aquifer exemption package to EPA Region 9 in order to permit these Class II injection activities. Some aquifers were exempted at the time California received primacy. However, over the years many of these Class II operations have expanded and/or moved into different formations, and injection is occurring outside the boundary of the original exempted aquifers. As a result, the State of California is requesting the owners/operators of these Class II wells to submit an aquifer exemption package to continue operating in

these formations. After California reviews the aquifer exemption packages and determines that the injection activities meet the aquifer exemption criteria, California will forward these aquifer exemption packages to EPA Region 9.

For planning purposes, EPA Region 9 expects to receive up to fifty (50) aquifer exemption packages from the State of California throughout the period of performance. EPA expects approximately twenty (20) aquifer exemption packages will cover Class II projects containing one (1) to one hundred (100) injection wells, twenty (20) aquifer exemption packages for projects containing one hundred (100) to five hundred (500) injection wells and ten (10) aquifer exemption packages for projects including five hundred (500) to two thousand (2,000) injection wells.

Under this work assignment, the EPA WACOR will send the contractor nonsubstantial UIC program revisions for aquifer exemption packages from the State of California. The EPA WACOR expects to send these requests to the contractor electronically.

Subtask 4.1: Track the Aquifer Exemption Packages EPA Region 9 Receives from the State of California.

Under this Task, the contractor shall keep track of all aquifer exemption packages EPA Region 9 receives from the State of California. The contractor shall document key dates associated with each aquifer exemption package such as 1) the date the package was received by EPA Region 9; 2) the date EPA Region 9 determined the aquifer exemption package is complete; 3) dates of any information requests sent by EPA Region 9 to the State of California; 4) dates EPA Region 9 received additional information from the State of California; and 5) the date EPA Region 9 completed its review of the aquifer exemption package; 6) the date EPA Region 9 officially approved or denied the aquifer exemption request (date of the letter EPA sends to the State of California).

For planning purposes, the contractor shall expect to track up to fifty (50) aquifer exemption packages throughout the period of performance. The tracking of key dates can be entered into an Excel Spreadsheet or a table in a Word document. The contractor shall email the EPA WACOR a copy of the tracking document periodically to be determined at a later date the frequency based on the number of aquifer exemption packages received.

Subtask 4.2: Determine if the Aquifer Exemption Package is Complete

Under this Task, the contractor shall use a modified aquifer exemption checklist that was developed for reviewing proposed aquifer exemption packages submitted to EPA Region 9 by the State of California. This checklist is based on the original checklist found in the EPA Water Division Directors Memo, "Enhancing Coordination and Communication with States on Review and Approval of Aquifer Exemption Requests under SDWA," dated July 24, 2014. The EPA WACOR will provide the contractor an electronic copy of the modified checklist within five (5) business days of the approval of this work assignment amendment. For each aquifer exemption package the EPA WACOR receives from the State of California and forwards to the contractor, the contractor shall use the modified checklist described above and compare the aquifer exemption package to that checklist and determine whether the State of California has submitted a complete aquifer exemption package. EPA Region 9 expects to receive up to fifty (50) aquifer exemption packages from the State of California. The EPA WACOR will forward these aquifer exemption packages electronically to the contractor. For planning purposes, the contractor shall submit to the EPA WACOR a short summary of the documentation submitted and whether the aquifer exemption request is complete in addition to a completed checklist. This short summary should not exceed two (2) pages and be delivered electronically to the EPA WACOR within five (5) business days of receipt of the aquifer exemption request from the EPA WACOR. In the event

an aquifer exemption package(s) is(are) determined to be incomplete and is(are) returned to the State of California, a second completeness check will need to be performed for those returned aquifer exemption packages. For planning purposes, the contractor shall expect to deliver up to sixty-five (65) short summary documents to the EPA WACOR within the period of performance, fifty(50) initial completion checks and fifteen (15) revised completion checks.

Subtask 4.3: Review and Evaluate Aquifer Exemption Requests and Supporting Documents

Under this Task, the EPA WACOR will confirm whether the up to fifty (50) aquifer exemption packages forwarded under Subtask 4.2 above are complete and can be used for this subtask or whether a revised version of the aquifer exemption package will be forwarded to the contractor. Upon receipt of the aquifer exemption packages, the contractor shall use the modified aquifer exemption check list discussed above in Subtask 4.2 and determine whether the information provided by the State of California is adequate to substantiate the aquifer exemption packages. To make this determination, the Contractor shall review and evaluate the data, modeling results, and analyses submitted by the State of California to support its recommendation(s) to EPA to approve the aquifer exemption packages. In the summary memo, the contractor shall also make recommendations for EPA to request from the State of California additional data that may be missing and/or insufficient to support the conclusions in the aquifer exemption package(s).

For planning purposes, the Contractor shall summarize the detailed review of the aquifer exemption packages and develop a report or memo not to exceed five (5) pages per aquifer exemption package and deliver the report to the EPA WACOR within ten (10) business days of receipt of the aquifer exemption package. The contractor shall expect to review and evaluate up to fifty (50) aquifer exemption packages and deliver up to fifty (50) five-page summary reports. See description under Task 4 above for the range in size of expected aquifer exemption packages.

Subtask 4.4 – Develop a template letter for the statement of basis

Under this Task, the contractor shall develop a template letter documenting the statement of basis EPA will use to document its decision to either approve or deny an aquifer exemption request. The EPA WACOR will provide the contractor a few examples from recent AE decision letters to use as a guide to develop the template within five (5) business days of the approval of this work assignment.

For planning purposes, the contractor shall draft a template statement of basis letter within ten (10) business days of receipt of technical direction from the EPA WACOR. The statement of basis letter should not exceed ten (10) pages in length. The first draft of the template letter shall be delivered to the EPA WACOR within ten (10) business days of receipt of the sample letters described above. EPA will review the draft and submit comments to the contractor. Within ten (10) business days of receipt of EPA comments, the contractor shall submit a second draft of the template statement of basis letter to the EPA WACOR. EPA will review the second draft and submit final comments to the contractor. Within five (5) business days of receipt of these final comments, the contractor shall deliver to the EPA WACOR the final template.

Subtask 4.5: Provide Technical Support in Developing Statement of Basis Letters for Approving or Denying Aquifer Exemption Requests

Under this Task, the EPA WACOR will request contractor support in drafting the statement of basis letter that shall provide EPA's rationale for approving or denying an aquifer exemption request. The contractor shall use the template developed in Subtask 4.4 above for the statement of basis letter format and content for the contractor to follow.

For planning purposes, the contractor shall expect to draft up to fifty (50) statements of basis during this period of performance and each statement of basis shall be in the range of five (5) to ten (10) pages. The first draft of the statement of basis letter shall be due to the EPA WACOR within fifteen (15) business days of receipt of technical direction from the EPA WACOR. EPA will review the draft statement of basis letter and submit comments to the contractor. Within ten (10) business days of receipt of EPA's comments, the contractor shall deliver a final version of the statement of basis letter to the EPA WACOR.

Subtask 4.6: Develop GIS maps

Under this Task, the contractor shall develop GIS maps that plot the location of proposed aquifer exemptions or aquifer exemption applications received by EPA; the lateral and vertical extents of the aquifers proposed for exemption, if known; the location of Class II injection wells that may be shut-in or voluntarily relinquishing their permits; or the location of specific Class II wells by DOGGR Category or by DOGGR District, or other maps as required.

For planning purposes, the contractor shall develop up to ten (10) GIS maps throughout the period of performance. The EPA WACOR will provide the contractor either a website where data can be downloaded or the actual data to be used in developing these maps. The contractor shall deliver a draft GIS map electronically to the EPA WACOR within ten (10) business days of receiving technical direction from the EPA WACOR and the data to be used in developing the map. EPA will review and submit comments on the maps to the contractor. Within five (5) business days of receipt of EPA's comments, the contractor shall deliver a final GIS map electronically to the EPA WACOR.

Subtask 4.7: Provide Support for Public Notice(s) and Public Hearing(s)

Under this Task, the contractor shall provide logistic and/or technical support for possible public notice(s) and/or public hearing(s) if necessary. In the event an aquifer exemption request or application needs public notice and a public hearing, the contractor shall help draft the public notice, review and prepare draft responses to any public comments received during the public notice period. The contractor shall help locate and secure meeting space, a/v equipment, and/or lodging for a public hearing. The public hearing should be not more than four hours or a half day. The contractor may be needed to attend the public hearing and provide logistical support such as taking notes and transcribing the public hearing.

For planning purposes, the contractor shall expect to provide logistical and/or technical support for one public notice and one public hearing. The contractor shall expect to send one staff person to a public hearing. The contractor shall expect to locate and secure meeting space, a/v equipment as necessary, and lodging, if needed, for one public hearing. The EPA WACOR will provide written technical direction at a date to be determined for this Task.

Subtask 4.8: Provide Technical Support in Reviewing Class II Well Data

Under this Task, the contractor shall provide technical support in reviewing deliverables from the State of California primarily in the form of Excel Spreadsheets or Word documents. These State deliverables will include Class II well data such as location of the wells, formation(s), field(s), operator names, API numbers, status of the wells, type of injection (cyclic steam, disposal, etc.), indication of whether additional information is needed (information orders requested) to evaluate the well, and initial indication of whether the well needs an aquifer exemption or be shut-in. Other deliverables may contain summaries of the data and/or final disposition of wells based on the additional information received from the operators.

For planning purposes, the EPA WACOR will provide the state deliverables to the contractor

throughout the period of performance. Upon receipt of written technical direction, the contractor shall review these Excel Spreadsheets and summary documents and make recommendations to the EPA WACOR to request additional information from the State on specific wells that may be of concern (e.g., these wells are close to a drinking water supply or these wells were initially marked as needing to be shut-in), or make comments and/or observations regarding trends or findings in the data provided. The contractor shall deliver to the EPA WACOR within ten (10) business days a summary of any recommendations for EPA to request additional information from the State of California. The summary document should include well identification information such as API number, operator's name, field and formation (if provided) as well as the additional information recommended for each well. This document should not exceed five (5) pages. The contractor should expect to receive up to four (4) state deliverables, two or three spreadsheets and one or two summary documents.

The contractor shall also track any wells identified as being shut-in, note the documentation ordering these wells to be shut-in (e.g., shut-in orders or state regulations requiring the wells to be shut in by a certain date) or note that this information is missing. These notes can be entered into an Excel spreadsheet per technical direction. The contractor shall deliver upon technical direction the spreadsheet with these notes as well as a summary document not to exceed one page outlining the total number of wells shut-in and how many of those have documentation of being shut in.

Subtask 4.9: Provide Communications Support

Under this Task, the contractor shall provide support in drafting up to two (2) technical presentations (slides, in PowerPoint, and talking points) on the California Class II program and aquifer exemptions. One presentation would be internal to EPA managers and staff and the second presentation would be for the public (e.g., GWPC). For planning purposes, these presentations would be thirty (30) minutes to one (1) hour each. Upon receipt of technical direction from the EPA WACOR, the contractor shall provide a draft presentation (slides and talking points) within fifteen (15) business days. EPA will review the presentation and submit comments to the contractor. Upon receipt of EPA's comments, the contractor shall provide a final draft of the presentation to the EPA WACOR within five (5) business days.

Under this Task, the contractor shall also support EPA in developing briefing papers or quick turnaround summary and/or status update papers. For planning purposes, the contractor shall receive technical direction to prepare up to three (3) briefing or quick turnaround papers. These papers should not exceed five (5) pages. Upon receipt of technical direction from the EPA WACOR, the contractor shall deliver the briefing or quick turnaround paper within five (5) business days.

IV. SCHEDULE OF DELIVERABLES:

TASK No.	DELIVERABLE	DATE DUE TO EPA
Task 0: Work Plan and Budget		
	Work plan, budget, and QA supplemental	According to Contract
	Telephone calls between WAM and Project Officer.	Weekly
	Face-to-face meetings at EPA HQ	Monthly
	Kick-off Meeting at EPA	Within 5 calendar days of work assignment approval
	Progress and financial reports	Monthly
Task 1: Track Primacy States' UIC Program Regulations		

	Track Primacy States' UIC regulatory and statutory changes	March 2016 and September 2016
Task 2:	Perform Comparison of states' §1422 UIC Programs (Including Class VI)	
	2.1 Electronic copy of states' regulations and statutes	TBD (within 10 calendar days of receiving written Technical Direction)
	2.2 §1422 Crosswalk Crosswalk	TBD (within 30 calendar days of receiving written Technical Direction)
	2.3 Summary of Findings Summary	TBD (within 30 calendar days of receiving written Technical Direction)
Task 3:	Perform Comparison of states' §1425 UIC Programs	
	3.1 Electronic copy of states' regulations and statutes	TBD (within 10 calendar days of receiving written Technical Direction)
	3.2 §1425 Crosswalk Crosswalk	TBD (within 30 calendar days of receiving written Technical Direction)
	3.3 Summary of Findings Summary	TBD (within 30 calendar days of receiving written Technical Direction)
Task 4:	Provide Non-Substantial UIC Program Revision Support for Aquifer Exemption Requests from the State of California	
	4.1 Track the aquifer exemption packages EPA Region 9 receives from the State of California	TBD
	4.2 Determine Aquifer Exemption Request is Complete	TBD (within 5 business days of receiving written Technical Direction)
	4.3 Review Documents Submitted in Support of Aquifer Exemption Requests	TBD (within ten business days of receiving written Technical Direction)
	4.4 Develop a template letter for the statement of basis	

	First Draft	TBD (within ten business days of receiving written Technical Direction)
	Final Draft	TBD (within five business days of receiving written Technical Direction)
	4.5 Provide Support in Developing Statements of Basis for Approving or Denying Aquifer Exemption Requests	
	First Draft	TBD (within fifteen business days of receiving written Technical Direction)
	Final Draft	TBD (within five business days of receiving written Technical Direction)
	4.6 Develop GIS Maps	
	First Draft	TBD (within ten business days of receiving written Technical Direction)
	Final Draft	TBD (within five days of receiving written Technical Direction)
	4.7 Provide Support for Public Notice and Public Hearing	TBD
	4.8 Provide Technical Support for Reviewing Class II Well Data	TBD (within ten business days of receiving written Technical Direction)
	Summary or recommendations	
	4.9 Provide Communication Support	
	Technical PowerPoint presentations	TBD (within fifteen business days of receiving written Technical Direction)
	First Draft	
	Final Draft	TBD (within five business days of receiving written Technical Direction)
	Briefing Papers or Summary Reports	TBD (within five business days of receiving written Technical Direction)

V. Miscellaneous

Software Application Files and Accessibility

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: <http://www.section508.gov/>

Preferred text format:	MS Word, 8.0 or higher (Office 2003 or higher)
Preferred presentation format:	Power Point, Office 2003 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

TRAVEL

Travel is anticipated under this work assignment. One contractor is expected to travel to the State of California, most likely Bakersfield, California, for a maximum three days. The date of this trip has yet to be determined.

MEETINGS, CONFERENCES, TRAINING EVENTS, AWARD CEREMONIES AND RECEPTIONS

All appropriate clearances and approvals required by Agency policy in support of any and all conference related activities and expenses, including support of meetings, conferences, training events, award ceremonies and receptions, including the form 5170 for all meetings costing more than \$20,000, shall be obtained by the EPA CL COR as needed and provided to the Contracting Officer. Work under conference related activities and expenses shall not occur until this approval is obtained and provided by the EPA CL COR.

CONTRACTOR IDENTIFICATION

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the CO, PO and/or WACOR.

PRINTING

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

VI. Quality Assurance Surveillance Plan

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards. Additional project specific quality assurance surveillance plan requirements are identified below.

<u>Performance Requirements</u>	<u>Performance Standards</u>	<u>Surveillance Methods</u>
Performance Standards are applicable to all PWS requirements and will be utilized to determine eligibility for		

Award Term Options.		
<u>Programmatic Requirement:</u> The contractor shall develop products that are based on best available information and resources.	<u>Programmatic Standard:</u> Outputs are based on best available information and resources; Documentation of sources used, not used, and limitations of available data.	EPA will review all products for conformance with the requirements of the SDWA Amendments, Clean Water Act and other related mandates, including Small Business Regulatory Enforcement Fairness Act 1996 (SBREFA) and Unfunded Mandates Reform Act of 1995 (UMRA).
<u>Cost Control Requirement</u> The Contractor shall perform all work in an efficient and cost effective manner, applying cost control measures where practical.	<u>Cost Control Standard:</u> Implementation of cost control system to monitor and track project status, that indicate level of budget utilized and forecast remaining budget needs to complete project. The contractor shall notify project COR immediately in cases where issues impact project cost are identified.	The EPA Project Officer will routinely discuss the work progress and contract level and work assignment expenditures with the Project Manager. The WACOR will maintain regular contact with the Contractor's designated work assignment /project manager to discuss work assignment progress and expenditures and will review and verify expenditures and technical progress before invoice payments are authorized.
<u>Schedule Requirement</u> The Contractor shall provide services and submit deliverables in accordance with approved work assignment milestone and deliverable schedules.	<u>Schedule Standard:</u> Services and deliverables shall be in accordance with schedules stated in each task order. Unless amended or modified by an approved EPA action, a deliverable that is received 7-days past the due date, will be considered unsatisfactory performance.	EPA will closely monitor task milestone and deliverable schedules and review the Contract Monthly Progress Reports and any special reporting requirements to compare actual delivery dates to those approved in the work assignment.
<u>Document Development Requirement:</u> The Contractor shall provide documents that are technically and factually accurate, and suited to the intended audience.	<u>Document Development Standard:</u> Information to be disseminated by EPA will meet the requirements of OMB's "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity for Information Disseminated by Federal Agencies (67 FR 8451)	The WACOR will review drafts to assess technical accuracy and editorial quality. The WAM will identify all inaccuracies and needed edits and corrections to the Contractor in the initial review of draft documents

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 0-62				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2022 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name UIC Primacy and Program Revisi				
Contractor Cadmus Group, Inc., The					Specify Section and paragraph of Contract SOW 4.3					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 09/01/2015 To 06/30/2016				
Comments: The purpose of this amendment 1 to Cadmus (EP-C-15-022)WA 0-62 is to update the QASP to match the contract level QASP. See Attached.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:				
09/01/2015 To 06/30/2022										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Lisa McWhirter <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number 202-564-2317 FAX Number:			
Project Officer Name Nancy Parrotta <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:			
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: FAX Number:			
Contracting Official Name Courtney Stallworth <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 513-487-2002 FAX Number:			

Quality Assurance Surveillance Plan
EP-C-15-022 WA 0-62

<u>Performance Requirement</u>	<u>Measureable Performance Standards</u>	<u>Surveillance Methods</u>	<u>Incentives/Disincentives</u>
<u>Programmatic Standard:</u> Outputs are based on best available information and resources; Documentation of sources used, not used, and limitations of available data; Description of methodological choices made both conceptually and in data selection. Assumptions utilized in environmental planning and applying engineering principles are clearly documented.	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	EPA will review all products for conformance with the requirements of the SDWA Amendments, Clean Water Act and other related mandates, including Small Business Regulatory Enforcement Fairness Act 1996 (SBREFA) and Unfunded Mandates Reform Act of 1995 (UMRA).	<p>Two or more work assignments per contract period where the contractor does not meet the measureable performance standard will be considered unsatisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Management.</p> <p>Fewer than two work assignments per contract period where the contractor does not meet the measureable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Management.</p>
<u>Cost Control Standard:</u> Implementation of cost control system to monitor and track project status, that indicate level of budget utilized and forecast remaining budget needs to complete project. The contractor shall notify project COR immediately in cases where issues impact project cost are identified. The contractor shall provide a risk management strategy that identifies specific project element(s) that adversely impact proposed work plan. The risk management strategy shall present impacts if course is continued without mitigation, and solutions to resolve the issue(s). The risk Management Strategy	The contractor shall manage costs to the level of the approved ceiling on each individual WA. The contractor shall notify the EPA WACOR, CL COR, and CO when 75% of the approved funding ceiling for any particular WA is reached. If a contractor fails to manage and control cost, any resultant overrun cannot exceed the total contract obligation for that period.	The EPA CL COR will routinely discuss the work progress and contract level and individual task order expenditures with the Project Manager. The WACOR will maintain regular contact with the Contractor's designated task order manager/project manager to discuss task order progress and expenditures and will review and verify expenditures and technical progress before invoice payments are authorized.	<p>If the contractor does not meet the measurable performance standards per contract period it will be assigned a rating of Unsatisfactory in CPARS under the category of Cost Control.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measureable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the RFP.</p>

Quality Assurance Surveillance Plan
EP-C-15-022 WA 0-62

shall consider process, schedule, prioritization, and cost benefit analysis.			
<p><u>Schedule Standard:</u> Services and deliverables shall be in accordance with schedules stated in each task order. Unless amended or modified by an approved EPA action, a deliverable that is received 7-days past the due date, will be considered unsatisfactory performance.</p>	No more than 15% of all deliverables per WA shall be submitted more than 3 work days past the due date.	EPA will closely monitor task milestone and deliverable schedules and review the Contract Monthly Progress Reports and any special reporting requirements to compare actual delivery dates to those approved in task orders. EPA will notify the contractor when it becomes apparent that an established schedule will not be met.	<p>If the contractor does not meet the measurable performance standards per WA it will be assigned a rating of Unsatisfactory in CPARS under the category of Schedule.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Schedule if the contractor meets the measureable performance standards.</p>
<p><u>Document Development:</u> Documents shall be technically and factually accurate, and suited to the intended audience. The draft version of a document shall meet a standard of no more than 2 typographical and/or grammatical errors per page and require no more than two editorial revisions. Final documents must meet a standard of no more than 2 typographical and/or grammatical errors per document.</p>	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	The WAC will review drafts to assess technical accuracy and editorial quality. The WACOR will identify all inaccuracies and needed edits and corrections to the Contractor in the initial review of draft documents	<p>If the contractor does not meet the measurable performance standards per work assignment it will be assigned a rating of Unsatisfactory in CPARS under the category of Technical (Quality of Product).</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Technical (Quality of Product) if the contractor meets the measureable performance standards.</p>

Work Assignment Form. (WebForms v1.0)

PERFORMANCE WORK STATEMENT
Cadmus Contract # EP-C-15-022
Work Assignment# 0-62, Amendment 2

I. ADMINISTRATIVE

A. Title: UIC Primacy and Program Revision Support

B. Work Assignment COR (WACOR):

Lisa McWhirter
Office of Ground Water and Drinking
Water (OGWDW)
1200 Pennsylvania Avenue, NW (MC:
4606M)
Washington, DC 20460
202-564-2317
202-564-3754 (fax)

**Alternate Work Assignment COR
(WACOR):**

Robert-Eu Smith
Office of Ground Water and Drinking Water
(OGWDW)
1200 Pennsylvania Avenue, NW (MC:
4606M)
Washington, DC 20460
202-564-3895
202-564-3754 (fax)

C. Quality Assurance

No change.

D. Background

No change.

II. OBJECTIVE: The purpose of this Amendment 2 to the Performance Work Statement is to create a task where the contractor shall support EPA in conducting site visits of oil/gas fields where owners/operators are requesting aquifer exemptions.

III. TASK DETAIL

The contractor shall perform the following tasks:

Task 0: Work Plan and Monthly Progress Reports

No change.

Task 1: Track Primacy States' UIC program regulations (PWS Sections 1.5 and 4.3)

No change.

Task 2: Perform comparison of State UIC §1422 Program Regulations (Including Class VI) (PWS Section 4.3)

**Subtask 2.1: Research Federal and State SDWA § 1422 UIC Program Regulations
(Including Class VI) for up to four (4) states**

No change.

Subtask 2.2: Develop and Perform Comparison of State UIC §1422 Crosswalks (Including Class VI)

No change.

Subtask 2.3: Summarize Findings in Subtask 2.2

No change.

Task 3: Perform comparison of State UIC §1425 Program Regulations

Subtask 3.1: Research Federal and State SDWA §1425 UIC Program Regulations for up to two (2) states

No change.

Subtask 3.2: Develop and Perform Comparison of State UIC §1425 Crosswalks

No change.

Subtask 3.3: Summarize Findings in Subtask 3.2

No change.

Task 4: Provide Non-substantial UIC Program Revision Support for Aquifer Exemption Requests from the State of California

Adding Subtask 4.10. See below.

Subtask 4.1: Track the Aquifer Exemption Packages EPA Region 9 Receives from the State of California.

No change.

Subtask 4.2: Determine if the Aquifer Exemption Package is Complete

No change.

Subtask 4.3: Review and Evaluate Aquifer Exemption Requests and Supporting Documents

No change.

Subtask 4.4 – Develop a template letter for the statement of basis

No change.

Subtask 4.5: Provide Technical Support in Developing Statement of Basis Letters for Approving or Denying Aquifer Exemption Requests

No change.

Subtask 4.6: Develop GIS maps

No change.

Subtask 4.7: Provide Support for Public Notice(s) and Public Hearing(s)

No change.

Subtask 4.8: Provide Technical Support in Reviewing Class II Well Data

No change.

Subtask 4.9: Provide Communications Support

No change.

Subtask 4.10: Conduct Site Visits of Proposed Aquifer Exemption Sites

Adding Subtask 4.10.

Under this Task, the contractor shall provide technical support to EPA in conducting site visits of oil/gas fields where aquifer exemptions are being requested for Class II injection activities. The contractor shall be reviewing background technical information pertaining to these oil/gas fields and proposed aquifer exemptions in California and meeting with state and EPA representatives to discuss the specifics of the proposed aquifer exemptions. The contractor shall provide technical feedback on the elements of the proposed aquifer exemption packages/sites during the site visit(s) and provide a written summary report not to exceed five (5) pages within five (5) business days of the site visit. For planning purposes, the contractor shall expect to send up to two (2) people to Bakersfield, California for up to five (5) days in May or June 2016.

IV. SCHEDULE OF DELIVERABLES:

TASK No.	DELIVERABLE	DATE DUE TO EPA
	4.10 Conduct Site Visits Summary Report	May/June 2016 (within five business days of conducting site visit(s))

V. Miscellaneous

Software Application Files and Accessibility

No Change

VI. Quality Assurance Surveillance Plan

No Change

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 0-70				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2016 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name Aquifer Exemption Data Initiat				
Contractor Cadmus Group, Inc., The					Specify Section and paragraph of Contract SOW 5.1, 5.22, 2.3					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 09/01/2015 To 06/30/2016				
Comments: The contractor is allowed an immediate start on this Work Assignment. Thus, work is authorized to began 12/15/2015.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
SFO <input type="checkbox"/> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:				
09/01/2015 To 06/30/2016										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:			Cost/Fee:			LOE:				
Cumulative Approved:			Cost/Fee:			LOE:				
Work Assignment Manager Name Jill Dean						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number 202-564-8241				
						FAX Number:				
Project Officer Name Nancy Parrotta						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 202-564-5260				
						FAX Number:				
Other Agency Official Name						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number:				
						FAX Number:				
Contracting Official Name Tammy Adams						Branch/Mail Code:				
_____ (Signature) (Date)						Phone Number: 513-487-2030				
						FAX Number: 513-487-2545				

PERFORMANCE WORK STATEMENT
Cadmus EP-C-15-022
Work Assignment No. 0-70

I. ADMINISTRATIVE:

A. Title: Aquifer Exemption Data Initiative

**B. Work Assignment Contracting
Officer's Representative (WACOR)::**

Jill Dean
US EPA Headquarters
OGWDW (4606M)
1200 Pennsylvania Avenue NW
Washington, DC 20460
Office: 202-564-8241
Fax: 202-564-3756
E-mail: dean.jill@epa.gov

Alternate WACOR:

William Bates
US EPA Headquarters
OGWDW (4606M)
1200 Pennsylvania Avenue NW
Washington, DC 20460
Office: 202-564-6165
Fax: 202-564-3756
E-mail: bates.william@epa.gov

C. Quality Assurance:

Tasks 2 and 3 in this Work Assignment (WA) require the use of primary and/or secondary data. Consistent with the Agency's Quality Assurance (QA) requirements, the contractor must prepare a complete Project Specific Quality Assurance Project Plan (PQAPP), to assure the quality of the data used under this WA. Work on these tasks cannot proceed until the contractor receives notification of PQAPP approval from the Project Officer (PO) via email. The QA requirements must be addressed in the monthly progress reports as specified under Task 0 below.

Additional information on the PQAPP is described in the Task 1.

D. Background:

The Underground Injection Control (UIC) program has collected national aquifer exemption data in EPA Headquarters. The UIC program requirements are found in the Code of Federal Regulations (CFR) at 40 CFR Parts 144, 146 and 148. The requirements of concern in this work assignment are requests for aquifer exemptions and the supporting underlying data. An aquifer exemption is an aquifer or a portion thereof which meets the criteria for an "underground source of drinking water" as laid out in 40 CFR 146.3 and may be determined under 40 CFR 144.7 to be an exempted aquifer if it meets the criteria of 40 CFR 146.4 (a), (b), (c) and (d). Basically, in order for aquifers (USDWs) to be removed from UIC program protection, they must not serve as a drinking water source now or in the future based on criteria listed in (a) and (b) 1-4 and (c) that it contains total dissolved solids that is more than 3,000 and less than 10,000 mg/l and is not reasonably expected to supply a public water system. Most aquifer exemption requests are usually associated with an injection well permit and are considered a UIC program revision. Aquifer exemption requests are generally managed at the

EPA regional and state level, however, there are instances where EPA Headquarters gets involved in the process, namely because some aquifer exemption requests are considered major program revisions. Owners/operators (o/o) of injection wells wishing to exempt underground sources of drinking water (USDW) for purposes associated with underground injection projects may submit an aquifer exemption request or application to the regulatory agency for review. If the regulatory agency is a delegated state UIC program, it can review the application and make a determination that it is technically sound and submit its recommendation for approval to EPA. Only EPA can approve aquifer exemptions. In the case of a Direct Implementation state (States without the UIC program delegation are run by EPA Regions.), the o/o submits the aquifer exemption application directly to the EPA region for review and approval.

II. OBJECTIVE:

EPA maintains aquifer exemptions data at Headquarters. The contractor shall provide technical support to EPA for the Aquifer Exemption Data Initiative to update the current aquifer exemptions dataset with new information. Technical support may include collecting aquifer exemption data from the EPA regions, communicating with the EPA regions to ensure accurate interpretation of the data, performing quality control/assurance procedures, and finalizing the aquifer exemption data in an Excel spreadsheet and geospatial information system (GIS) file.

The contractor shall provide technical and general support per technical direction only from the WACOR or alternate WACOR for the Aquifer Exemption Data Initiative.

III. TASK DETAIL:

The contractor shall perform the following tasks:

Task 0 – Work Plan, Weekly Conference Calls, and Monthly Progress Reports Submission

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, and the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. For planning purposes, the work plan shall include the requirement that all electronic and information technology (EIT) and all EIT deliverables that will be publicly released be Section 508 compliant in accordance with the policies referenced at <http://www.epa.gov/accessibility>. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

Weekly conference calls between the WACOR and contractors are expected to communicate work progress and address any challenges that arise. For planning purposes, no more than two (2) contractor staff should attend the weekly conference calls. Weekly calls are expected to be no more than one (1) hour in duration.

This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in the WA.

Deliverables: Work plan and monthly progress and financial reports

Task 1 – Project-Specific Quality Assurance Project Plan

The contractor shall prepare a PQAPP, as noted in section C. Quality Assurance, and ensure the quality of secondary data used to complete these tasks. The PQAPP should reflect the QA procedures that the contractor shall take to assure project quality. The contractor shall write the PQAPP using the active voice. The text of the PQAPP must explicitly reference tools that the contractor shall use to document and review reproducibility and traceability, such as standard operating procedures, check lists, and guidelines. The PQAPP must include the tools as attachments for EPA's review and approval. The contractor shall perform work under this performance work statement in a manner consistent with the PQAPP. In addition, the contractor shall document relevant QA activities in any deliverable.

Deliverable: PQAPP

Task 2 – Data Update and Quality Assurance

The Region 8 aquifer exemption data includes more than three thousand (3,000) rows of data with around twenty (20) data fields. The WACOR will provide the contractor with a current version of the Region 8 data. The contractor shall map EPA Region 8 aquifer exemption data to a Headquarters spreadsheet on aquifer exemptions, communicate with Region 8 staff to ensure accurate interpretation of the data, perform quality control/assurance procedures, and finalize the aquifer exemption spreadsheet.

The contractor shall map the Region 8 data in such a way that the Headquarters spreadsheet may be easily updated with accurate data. Mapping the data includes identifying the Region 8 data fields and any calculations of that data needed to update the Headquarters spreadsheet. It may be necessary for the contractor to consult Region 8 staff to ensure the accurate interpretation of the Region 8 data and accurate reflection of the Region 8 data in the Headquarters spreadsheet. For planning purposes, the contractor shall prepare a form or query that Region 8 may include in their database that automatically prepares the Region 8 data in a format compatible with the Headquarters spreadsheet based on the mapping the contractor previously conducted.

Any data that do not meet acceptance criteria prescribed by the PQAPP shall be identified to the EPA in a memorandum with an explanation of the quality issue. For planning purposes, up to ten (10) memorandums describing data quality issues may be needed. It may be necessary for the contractor, upon request from the EPA, to contact specific EPA Regional staff to clarify or update some data in order to meet quality acceptance criteria. The contractor shall prepare up to ten (10) memorandums that describe the resolution of the data quality issues identified in previous memorandums; resolution may include changes to database structure that improve communications, exclusion of data that does not meet quality criteria described in the PQAPP, or corrections to data elements.

The contractor shall update the Headquarters spreadsheet with the Region 8 data, including the appropriate QA fields already found in the Headquarters spreadsheet.

The contractor shall provide the EPA WACOR with draft versions of the Region 8 data and the updated Headquarters spreadsheet, as needed, in order to facilitate decisions about data management and clarifications requested of EPA Region 8 staff. After quality assessment has concluded, the contractor shall provide the EPA COR with a final version of the Headquarters spreadsheet that includes the updated Region 8 data.

Deliverables: QA issue memorandums, resolution of QA issue memorandums, draft and final versions of datasets

Task 3 – Geospatial File Development

Once the aquifer exemption dataset described in Task 2 is final, the contractor shall pair selected data elements from the spreadsheet with point and polygon locations for the exempted aquifers developed in ESRI ArcGIS 10.2. The contractor shall identify whether individual records meet QA criteria using flag fields. The contractor shall provide the EPA WACOR with a subset of the data that meets QA criteria; rows with insufficient, inaccurate, contradictory, or otherwise invalid location information will be excluded. The subset of data will include identifying information for each exempted aquifer; locational information such as county, state, tribe, latitude and longitude of the centroid for each exempted aquifer; the injection well class associated with the aquifer exemption; the exemption area; depth of the exempted aquifer; lithology; approval date; and injectate characteristics. The subset of data shall be appropriate for separate analysis in ESRI ArcGIS 10.2.

EPA is aware that a portion of the Region 8 locational data may be unusually described, e.g. 100 feet from the southern boundary of a specific township, range, and section. The contractor shall develop a script able to draw boundaries for the unusual descriptions of the exempted aquifers. For planning purposes, approximately five hundred (500) aquifer exemptions may have unusual descriptions that require a script to develop the polygon boundary.

The contractor shall prepare metadata for the geodata file using the EPA Metadata Editor. (EME; for more information on the EPA Metadata Editor, please see <https://edg.epa.gov/metadata/catalog/main/home.page>.) For planning purposes, the data file destined for DWMAPS will include up to fifteen data fields and up to five thousand (5,000) rows of data. All fields will be completed to the contractor's best knowledge with input from the WAM and EPA Region 8 staff, including optional fields. The final metadata will be validated using EME's validation tool and provided in XML and HTML formats.

Deliverables: file with subset of data for separate GIS analysis; metadata for geospatial file

IV. Schedule of Deliverables:

TASK No.	DELIVERABLE	DATE DUE TO EPA
0	Work Plan	According to Contract
	Monthly progress and financial reports	Monthly
	Conference call to discuss project progress	Weekly

TASK No.	DELIVERABLE	DATE DUE TO EPA
1	PQAPP update	Within fifteen (15) days of issuance of work assignment
2	Data quality issue memorandums	As requested by WACOR
	Resolution of data quality issue memorandums	As requested by WACOR
	Draft dataset	As requested by WACOR
	Final dataset	By January 29, 2016
3	File with subset of data appropriate for GIS analysis	By January 29, 2016

V. Miscellaneous

Software Application Files and Accessibility

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: <http://www.section508.gov/>

Preferred text format:	MS Word, 8.0 or higher (Office 2003 or higher)
Preferred presentation format:	Power Point, Office 2003 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

VI. Quality Assurance Surveillance Plan

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards. Additional project specific quality assurance surveillance plan requirements are identified below.

Performance Requirement	Measureable Performance Standards	Surveillance Methods	Incentives/Disincentives
<u>Programmatic Standard:</u> Outputs are based on best available information and resources; Documentation of sources used, not used, and limitations of available data; Description of methodological choices made both conceptually and in data selection. Assumptions utilized in environmental planning and applying engineering principles are clearly documented.	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	EPA will review all products for conformance with the requirements of the SDWA Amendments, Clean Water Act and other related mandates, including Small Business Regulatory Enforcement Fairness Act 1996 (SBREFA) and Unfunded Mandates Reform Act of 1995 (UMRA).	<p>Two or more work assignments per contract period where the contractor does not meet the measureable performance standard will be considered unsatisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Management.</p> <p>Fewer than two work assignments per contract period where the contractor does not meet the measureable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Management.</p>
<u>Cost Control Standard:</u> Implementation of cost control system to monitor and track project status, that indicate level of budget utilized and forecast remaining budget	The contractor shall manage costs to the level of the approved ceiling on each individual WA. The contractor shall notify the EPA WACOR, CL COR, and CO when 75% of the approved funding	The EPA CL COR will routinely discuss the work progress and contract level and individual task order expenditures with the Project Manager. The WACOR will maintain regular contact with	If the contractor does not meet the measurable performance standards per contract period it will be assigned a rating of Unsatisfactory in CPARS under the category of Cost Control.

Performance Requirement	Measureable Performance Standards	Surveillance Methods	Incentives/Disincentives
needs to complete project. The contractor shall notify project COR immediately in cases where issues impact project cost are identified. The contractor shall provide a risk management strategy that identifies specific project element(s) that adversely impact proposed work plan. The risk management strategy shall present impacts if course is continued without mitigation, and solutions to resolve the issue(s). The Risk Management Strategy shall consider process, schedule, prioritization, and cost benefit analysis.	ceiling for any particular WA is reached. If a contractor fails to manage and control cost, any resultant overrun cannot exceed the total contract obligation for that period.	the Contractor's designated task order manager/project manager to discuss task order progress and expenditures and will review and verify expenditures and technical progress before invoice payments are authorized.	A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measureable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the RFP.
<u>Schedule Standard:</u> Services and deliverables shall be in accordance with schedules stated in each task order. Unless amended or modified by an approved EPA action, a deliverable that is received 7-days past the due date, will be considered unsatisfactory performance.	No more than 15% of all deliverables per WA shall be submitted more than 3 work days past the due date.	EPA will closely monitor task milestone and deliverable schedules and review the Contract Monthly Progress Reports and any special reporting requirements to compare actual delivery dates to those approved in task orders. EPA will notify the contractor when it becomes apparent that an established schedule will not be met.	If the contractor does not meet the measurable performance standards per WA it will be assigned a rating of Unsatisfactory in CPARS under the category of Schedule. A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of

Performance Requirement	Measureable Performance Standards	Surveillance Methods	Incentives/Disincentives
			Schedule if the contractor meets the measureable performance standards.
<u>Document Development:</u> Documents shall be technically and factually accurate, and suited to the intended audience. The draft version of a document shall meet a standard of no more than 2 typographical and/or grammatical errors per page and require no more than two editorial revisions. Final documents must meet a standard of no more than 2 typographical and/or grammatical errors per document.	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	The WAC will review drafts to assess technical accuracy and editorial quality. The WACOR will identify all inaccuracies and needed edits and corrections to the Contractor in the initial review of draft documents	If the contractor does not meet the measurable performance standards per work assignment it will be assigned a rating of Unsatisfactory in CPARS under the category of Technical (Quality of Product). A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Technical (Quality of Product) if the contractor meets the measureable performance standards.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 0-70				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2017 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name Aquifer Exemptions Data Initia				
Contractor CADMUS GROUP, INC., THE					Specify Section and paragraph of Contract SOW 5.1, 2.3					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 05/25/2016 To 06/30/2016				
Comments: The purpose of this amendment 1 to Cadmus (EP-C-15-022) WA 0-70 is to add 8 hours to Task 0, 72 hours to Task 2 and 120 hours to Task 3.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO <input type="checkbox"/> Note: To report additional accounting and appropriations date use EPA Form 1900-69A. (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE: 412				
09/01/2015 To 06/30/2017										
This Action:						-212				
Total:						200				
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee		LOE:				
Cumulative Approved:				Cost/Fee		LOE:				
Work Assignment Manager Name Jill Dean <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-8241 FAX Number:				
Project Officer Name Nancy Parrotta <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Tammy Adams <div style="display: flex; justify-content: space-between;"> <div>_____</div> <div>_____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>(Signature)</div> <div>(Date)</div> </div>						Branch/Mail Code: Phone Number: 513-487-2030 FAX Number: 513-487-2545				

PERFORMANCE WORK STATEMENT
Cadmus EP-C-15-022
Work Assignment No. 0-70
Amendment #1

I. ADMINISTRATIVE:

A. Title: Aquifer Exemption Data Initiative

B. Work Assignment Contracting Officer Alternate WACOR:
Representative (WACOR):

Jill Dean
US EPA Headquarters
OGWDW (4606M)
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Fax: 202-564-3756
E-mail: dean.jill@epa.gov

William Bates
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Fax: 202-564-3756
E-mail: bates.william@epa.gov

C. Quality Assurance:

Tasks 2 and 3 in this Work Assignment (WA) require the use of primary and/or secondary data. Consistent with the Agency's Quality Assurance (QA) requirements, the contractor must prepare a complete Project Specific Quality Assurance Project Plan (PQAPP), to assure the quality of the data used under this WA. Work on these tasks cannot proceed until the contractor receives notification of PQAPP approval from the Project Officer (PO) via email. The QA requirements must be addressed in the monthly progress reports as specified under Task 0 below.

Additional information on the PQAPP is described in the Task 1 of the approved work plan.

D. Background:

The Underground Injection Control (UIC) program has collected national aquifer exemption data in EPA Headquarters. The UIC program requirements are found in the Code of Federal Regulations (CFR) at 40 CFR Parts 144, 146 and 148. The requirements of concern in this work assignment are requests for aquifer exemptions and the supporting underlying data. An aquifer exemption is an aquifer or a portion thereof which meets the criteria for an "underground source of drinking water" as laid out in 40 CFR 146.3 and may be determined under 40 CFR 144.7 to be an exempted aquifer if it meets the criteria of 40 CFR 146.4 (a), (b), (c) and (d). Basically, in order for aquifers (USDWs) to be removed from UIC program protection, they must not serve as a drinking water source now or in the future based on criteria listed in (a) and (b) 1-4 and (c) that it contains total dissolved solids that is more than 3,000 and less than 10,000 mg/l and is not reasonably expected to supply a public water system. Most aquifer exemption requests are usually associated with an injection well permit and are

considered a UIC program revision. Aquifer exemption requests are generally managed at the EPA regional and state level, however, there are instances where EPA Headquarters gets involved in the process, namely because some aquifer exemption requests are considered major program revisions. Owners/operators (o/o) of injection wells wishing to exempt underground sources of drinking water (USDW) for purposes associated with underground injection projects may submit an aquifer exemption request or application to the regulatory agency for review. If the regulatory agency is a delegated state UIC program, it can review the application and make a determination that it is technically sound and submit its recommendation for approval to EPA. Only EPA can approve aquifer exemptions. In the case of a Direct Implementation state (States without the UIC program delegation are run by EPA Regions.), the o/o submits the aquifer exemption application directly to the EPA region for review and approval.

II. OBJECTIVE:

The amendment adds an additional eight (8) hours to Task 0 to develop an updated budget summary, an additional seventy two (72) hours to Task 2 and one hundred twenty (120) hours to Task 3 for expansion of the initial work to other EPA Regions' datasets.

III. TASK DETAIL:

The contractor shall perform the following tasks:

Task 0 – Work Plan, Weekly Conference Calls, and Monthly Progress Reports

Submission

The amendment adds an additional eight (8) hours to Task 0 to develop an updated budget summary.

Task 1 – Project-Specific Quality Assurance Project Plan

No changes.

Task 2 – Data Update and Quality Assurance

The amendment adds an additional seventy two (72) hours to Task 2 to update the aquifer exemption spreadsheet with new data from EPA Regional UIC programs other than Region 8 and to assess the quality of the data. The appropriate QA fields found in the spreadsheet should also be updated based on the quality assessment. The contractor shall provide the EPA WACOR with documentation that describes the methodology for collecting, organizing, and assessing data quality.

Any data that do not meet acceptance criteria prescribed by the PQAPP shall be identified to the EPA in a memorandum with an explanation of the quality issue. For planning purposes, up to five (5) memorandums describing data quality issues and the resolution of the issues may be needed. Resolution may include changes to spreadsheet structure that improve communications, exclusion of data that does not meet quality criteria described in the PQAPP, or corrections to data elements.

The contractor shall provide the EPA WACOR with draft versions of the updated spreadsheet, as needed, in order to facilitate decisions about data management and clarifications requested of EPA Regional staff. After quality assessment has concluded, the

contractor shall provide the EPA WACOR with a final version of the Headquarters spreadsheet that includes the updated data from all Regions and updated QA fields.

Deliverables: documentation of methodology and quality assessment, QA issue memorandums, draft and final versions of datasets

Task 3 – Geospatial File Development

The amendment adds an additional one hundred twenty (120) hours to Task 3 to develop, as needed, and update the geospatial file with data from EPA Regional UIC programs other than Region 8 and to assess the quality of the data. The contractor shall identify whether individual records meet QA criteria using flag fields. The contractor shall provide the EPA WACOR with a subset of the data that meets QA criteria; rows with insufficient, inaccurate, contradictory, or otherwise invalid location information will be excluded. The subset of data will include identifying information for each exempted aquifer; locational information such as county, state, tribe, latitude and longitude of the centroid for each exempted aquifer; the injection well class associated with the aquifer exemption; the exemption area; depth of the exempted aquifer; lithology; approval date; and injectate characteristics. The subset of data shall be appropriate for separate analysis in ESRI ArcGIS 10.2.

The contractor shall prepare metadata for the geodata file using the EPA Metadata Editor. (EME; for more information on the EPA Metadata Editor, please see <https://edg.epa.gov/metadata/catalog/main/home.page>.) For planning purposes, the data file destined for DWMAPS will include up to fifteen data fields and up to five thousand (5,000) rows of data. All fields will be completed to the contractor's best knowledge with input from the WACOR and EPA Region 8 staff, including optional fields. The final metadata will be validated using EME's validation tool and provided in XML and HTML formats.

Deliverables: geospatial file; metadata for geospatial file

IV. Schedule of Deliverables:

TASK No.	DELIVERABLE	DATE DUE TO EPA
0	Work Plan	According to Contract
	Monthly progress and financial reports	Monthly
	Conference call to discuss project progress	Weekly
1	PQAPP update	No updated needed for this amendment
2	Issue memorandums	As requested by WACOR
	Documentation of methodology	By June 30, 2016
	Draft dataset	As requested by WACOR
	Final dataset	By June 30, 2016
3	Geospatial file and accompanying metadata	By June 30, 2016

V. Miscellaneous

Software Application Files and Accessibility

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: <http://www.section508.gov/>

Preferred text format:	MS Word, 8.0 or higher (Office 2003 or higher)
Preferred presentation format:	Power Point, Office 2003 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

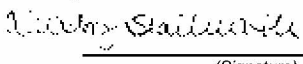
VI. Quality Assurance Surveillance Plan

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards. Additional project specific quality assurance surveillance plan requirements are identified below.

Performance Requirement	Measureable Performance Standards	Surveillance Methods	Incentives/Disincentives
<u>Programmatic Standard:</u> Outputs are based on best available information and resources; Documentation of sources used, not used, and limitations of available data; Description of methodological choices made both conceptually and in data selection. Assumptions utilized in environmental planning and applying engineering principles are clearly documented.	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	EPA will review all products for conformance with the requirements of the SDWA Amendments, Clean Water Act and other related mandates, including Small Business Regulatory Enforcement Fairness Act 1996 (SBREFA) and Unfunded Mandates Reform Act of 1995 (UMRA).	<p>Two or more work assignments per contract period where the contractor does not meet the measureable performance standard will be considered unsatisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Management.</p> <p>Fewer than two work assignments per contract period where the contractor does not meet the measureable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Management.</p>
<u>Cost Control Standard:</u> Implementation of cost control system to monitor and track project status, that indicate level of budget utilized and forecast remaining budget	The contractor shall manage costs to the level of the approved ceiling on each individual WA. The contractor shall notify the EPA WACOR, CL COR, and CO when 75% of the approved funding	The EPA CL COR will routinely discuss the work progress and contract level and individual task order expenditures with the Project Manager. The WACOR will maintain regular contact with	If the contractor does not meet the measurable performance standards per contract period it will be assigned a rating of Unsatisfactory in CPARS under the category of Cost Control.

Performance Requirement	Measureable Performance Standards	Surveillance Methods	Incentives/Disincentives
needs to complete project. The contractor shall notify project COR immediately in cases where issues impact project cost are identified. The contractor shall provide a risk management strategy that identifies specific project element(s) that adversely impact proposed work plan. The risk management strategy shall present impacts if course is continued without mitigation, and solutions to resolve the issue(s). The Risk Management Strategy shall consider process, schedule, prioritization, and cost benefit analysis.	ceiling for any particular WA is reached. If a contractor fails to manage and control cost, any resultant overrun cannot exceed the total contract obligation for that period.	the Contractor's designated task order manager/project manager to discuss task order progress and expenditures and will review and verify expenditures and technical progress before invoice payments are authorized.	A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measureable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the RFP.
<u>Schedule Standard:</u> Services and deliverables shall be in accordance with schedules stated in each task order. Unless amended or modified by an approved EPA action, a deliverable that is received 7-days past the due date, will be considered unsatisfactory performance.	No more than 15% of all deliverables per WA shall be submitted more than 3 work days past the due date.	EPA will closely monitor task milestone and deliverable schedules and review the Contract Monthly Progress Reports and any special reporting requirements to compare actual delivery dates to those approved in task orders. EPA will notify the contractor when it becomes apparent that an established schedule will not be met.	If the contractor does not meet the measurable performance standards per WA it will be assigned a rating of Unsatisfactory in CPARS under the category of Schedule. A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of

Performance Requirement	Measureable Performance Standards	Surveillance Methods	Incentives/Disincentives
			Schedule if the contractor meets the measureable performance standards.
<u>Document Development:</u> Documents shall be technically and factually accurate, and suited to the intended audience. The draft version of a document shall meet a standard of no more than 2 typographical and/or grammatical errors per page and require no more than two editorial revisions. Final documents must meet a standard of no more than 2 typographical and/or grammatical errors per document.	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	The WAC will review drafts to assess technical accuracy and editorial quality. The WACOR will identify all inaccuracies and needed edits and corrections to the Contractor in the initial review of draft documents	If the contractor does not meet the measurable performance standards per work assignment it will be assigned a rating of Unsatisfactory in CPARS under the category of Technical (Quality of Product). A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Technical (Quality of Product) if the contractor meets the measureable performance standards.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 0-83				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2016 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name HF Drinking Water Assessment				
Contractor Cadmus Group, Inc., The					Specify Section and paragraph of Contract SOW 4.3					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 09/10/2015 To 06/30/2016				
Comments: Work is authorized to begin on September 10, 2015.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:			LOE:					
09/01/2015 To 06/30/2016										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Caroline Ridley							Branch/Mail Code:			
_____ (Signature) _____ (Date)							Phone Number 703-347-8506			
							FAX Number:			
Project Officer Name Nancy Parrotta							Branch/Mail Code:			
_____ (Signature) _____ (Date)							Phone Number: 202-564-5260			
							FAX Number:			
Other Agency Official Name							Branch/Mail Code:			
_____ (Signature) _____ (Date)							Phone Number:			
							FAX Number:			
Contracting Official Name Courtney Stallworth							Branch/Mail Code:			
 ELECTRONIC SIGNATURE 2015.09.10 09:48:00 -04'00' _____ (Signature) _____ (Date)							Phone Number: 513-487-2002			
							FAX Number:			

PERFORMANCE WORK STATEMENT
EP-C-15-022
Work Assignment No. 0-83

I. ADMINISTRATIVE:

A. Title: Technical Support for the Hydraulic Fracturing Drinking Water Assessment

B. Work Assignment COR:

Alternate Work Assignment COR:

Caroline Ridley
National Center for Environmental
Assessment
Washington Division/Office of Research
and Development
1200 Pennsylvania Ave., NW (MC: 8623P)
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Phone: (703) 347-8506
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Stephen LeDuc
National Center for Environmental
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and Development
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FAX: (703) 347-8692
E-mail: leduc.stephen@epa.gov

Period of performance: Initiation of WA- August 31, 2016

C. Quality Assurance:

Task(s) 1-4 in this work assignment require the use of primary and/or secondary data. Consistent with the Agency's quality assurance (QA) requirements, the contractor must supplement the Contract-Level Quality Assurance Project Plan (QAPP), which has been provided by the contractor, to assure the quality of the data used under task(s) 1-4 of this work assignment. Work on this/these task(s) cannot proceed until the contractor receives notification of the SQAPP approval from the PO via e-mail. The project specific quality assurance requirements must be addressed in the work plan and monthly progress reports as specified under Task 0, below.

D. Background:

The combination of horizontal drilling and hydraulic fracturing has allowed commercial development of large reserves of natural gas and oil in the United States over the last decade. This surge in production has accompanying economic, energy security, and certain environmental benefits. However, as the use of hydraulic fracturing has increased, so have concerns about its potential impacts to drinking water resources. As a result, and at the urging of the US Congress, the Agency is currently conducting an assessment of the potential pathways and impacts of hydraulic fracturing on US drinking water quality and quantity, known internally as the Hydraulic Fracturing Drinking Water Assessment (HFDWA).

The external review draft of the HFDWA drew from a wide array of information and source materials. This included an assessment of the relevant literature, including scientific peer-

reviewed journal articles, federal and state reports, and publications from non-governmental organizations and industry. It also incorporated current Agency primary research efforts. The draft HFDWA is currently undergoing peer-review by EPA's Science Advisory Board (SAB) and is available for public comment. The SAB will discuss their preliminary review of the draft in October 2015 and issue their final report sometime thereafter. With the input from SAB and the public, the Agency will revise the draft HFDWA and release it as final on a schedule to be determined.

The scope of the HFDWA is on hydraulic fracturing of shale formations for natural gas extraction, with some study of other oil- and gas-producing formations, including tight sands, and coalbeds. It is centered on five stages of the water life-cycle of hydraulic fracturing: water acquisition; chemical mixing; well injection; flowback and produced water; and wastewater treatment and waste disposal.

II. OBJECTIVE:

The purpose of this work assignment is to support the Agency's development and revision of the Hydraulic Fracturing Drinking Water Assessment (HFDWA). By synthesizing data and information from EPA research and the peer-reviewed scientific literature, this assessment informs the public about the potential pathways for hydraulic fracturing activities to change the quality or quantity of drinking water resources. It also identifies factors that affect the frequency and severity of impacts and ways that potential negative impacts may be reduced, as they are reported in the literature.

To achieve this purpose the contractor shall be expected to organize and search for scientific literature; provide scientific and technical expertise and writing on topics relevant to understanding the impacts of hydraulic fracturing on drinking water resources; demonstrate experience and aptitude in research and writing science syntheses on the history and extent of oil and gas development, well construction, well integrity, movement of fluids in the subsurface environment, treatment disposal of hydraulic fracturing wastewaters, as well as other HF-related issues in order to assist in the revision of the draft HFDWA; and develop and edit figures, charts, and graphics.

The intended audience for this project is the public and, in particular, the US Congress, who urged the writing of this report and government entities that are now and will be making decisions in the near future to ensure drinking water safety in locations where hydraulic fracturing is taking place.

This project supports programmatic needs related to the protection of underground and surface sources of drinking water that may be in use now or in the future by producing a state-of-the-science synthesis of the impacts of hydraulic fracturing on drinking water quality and quantity. It does so via the Office of Research and Development's Safe and Sustainable Water Research program.

We will be working with other partners and external offices or agencies, as necessary, to obtain data and scientific expertise to complete this project.

III. TASK DETAIL:

All direction under this work assignment will be provided as written technical direction from the Work Assignment COR, as appropriate. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the Contract Level COR and the Contracting Officer, and is subject to the limitations of the technical direction contract clause. Each initial deliverable shall be provided to the EPA Work Assignment Contracting Officer's Representative (WACOR) and EPA Contract Level COR in draft form for review and comment. The contractor shall incorporate WACOR review comments into revisions of the drafts. All drafts and final reports shall be approved by the WACOR.

The tasks under this work assignment do not require the acquisition of "off-site" facilities for conferences and meetings as defined in the IPN 12-05 and the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

The contractor shall immediately alert the WA COR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

The contractor shall perform the following tasks:

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task shall be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a Supplemental Project Specific Quality Assurance Project Plan (SQAPP) appending the Contract-level Quality Assurance Project Plan (QAPP), noted above, and ensure the quality of secondary data and analyses used to complete these tasks. The work plan shall explain when the SQAPP shall be submitted based on the specific data requirements of the WA. This task also includes monthly progress and financial reports. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being

resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA.

Deliverables: Work plan, Supplemental Project Specific Quality Assurance Project Plan, monthly progress and financial reports.

Task 1: Technical subject matter, writing, and revising assistance- general support

The HFDWA will require an understanding of the literature on a variety of technical subjects, including, but not limited to: drilling for oil and gas; hydraulic fracturing; petroleum engineering; surface water and groundwater chemistry; environmental- and geo-chemistry; chemical fate and transport chemistry; toxicology; surface hydrology; groundwater and vadose zone hydrology; groundwater-surface-water interactions; and geology. The Contractor shall provide technical experts in these fields according to the needs of the assessment. These Contractor experts shall assist in reading and extracting information from the relevant literature, data analysis and synthesis (*e.g.*, GIS synthesis; download, QA, and analysis of FracFocus 2.0 disclosures), and technical writing for the HFDWA. Contractor personnel shall work closely with EPA chapter-leads in designing and executing data analyses, in writing designated portions of the HFDWA, and in implementing revisions to analyses, text, and figures (~60 excluding those in chapters referenced below) in response to SAB and public comments and EPA review (that are not included in Tasks 2-4). Total original pages written under this task will likely be <20.

The Contractor shall assist the EPA in evaluating and tracking data, literature, reports and other documents considered for citation in sections written under this task for compliance with quality standards under the *QAPP for Data and Literature Evaluation for EPA's Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources (Revision#2, November 2014)*. The current QAPP will be supplied by the EPA WACOR. For the current WA, the Contractor shall continue to use the protocols developed for the draft HFDWA, as provided by the EPA WACOR. If changes to the protocol are necessary, the Contractor shall discuss this with the EPA WACOR, and document any alterations made. Quality information shall be submitted for new references to the draft HFDWA (likely to be in the 10-15 range). The Contractor shall endeavor to be efficient in executing the evaluation and tracking by, for example, relying on authors familiar with the references through their writing under this task.

Writing produced under this task will utilize "Cite while you write" functionality of Endnote to embed references and link them back to the HERO database. Endnote software shall be provided by the Contractor. LitCiter, a necessary plug-in to Endnote and Word, will be provided to the Contractor and supported by HERO. Versions of Endnote and LitCiter may need to be updated periodically to ensure functionality.

Experts leading work under this task are also required to attend monthly 1 hr phone calls of the HFDWA team.

Deliverables: Draft and final designated analyses and written portions of the HFDWA; record of quality standard evaluation of literature.

Task 2: Technical subject matter, writing, and revision assistance- HF and oil/gas background chapter

The Contractor shall take a lead role in revising the Hydraulic Fracturing, Oil and Gas Production, and the US Energy Sector chapter (~35 pages with figures and references) with guidance from the WACOR. This shall require knowledge and expertise in all areas of the hydraulic fracturing water cycle and the history of oil and gas production technologies and trends. The Contractor shall revise the chapter in response to SAB and public review comments and to EPA review. Revisions shall include updating and adding sources of information to reflect the most current and relevant literature, revising current graphics as requested (~20 in current draft chapter), and reviewing/revising content in the Executive Summary and Synthesis chapter that draws on material from this chapter. The Contractor shall also contribute to the development of documents and spreadsheets that detail how EPA responded to SAB and public comments about this chapter.

The Contractor shall assist the EPA in evaluating and tracking data, literature, reports and other documents cited in sections written under this task for compliance with quality standards under the *QAPP for Data and Literature Evaluation for EPA's Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources (Revision#2, November 2014)*. The current QAPP will be supplied by the EPA WACOR. For the current WA, the Contractor shall continue to use the protocols developed for the draft HFDWA, as provided by the EPA WACOR. If changes to the protocol are necessary, the Contractor shall discuss this with the EPA WACOR, and document any alterations made. Quality information shall be submitted for new references since the development of the draft HFDWA (likely to be in the 10-15 range). The Contractor shall endeavor to be efficient in executing the evaluation and tracking by, for example, relying on authors familiar with the references through their writing under this task.

Writing produced under this task shall utilize "Cite while you write" functionality of Endnote to embed references and link them back to the HERO database. Endnote software shall be provided by the Contractor. LitCiter, a necessary plug-in to Endnote and Word, will be provided to the Contractor and supported by HERO. Versions of Endnote and LitCiter may need to be updated periodically to ensure functionality.

Experts leading work under this task are also required to attend monthly 1 hr phone calls of the HFDWA team, bi-weekly 1 hr calls of the chapter leads, and coordinate with other members of the HFDWA team on content and scope on an as needed basis.

The lead shall also be required to attend teleconferences of SAB deliberations on the HFDWA, as well as attend the SAB in-person meeting in Washington, DC October 28-30, 2015.

Deliverables: Draft chapter revised to address SAB and public comments; subsequent draft revised to address EPA management review comments; draft and final response to comments spreadsheets; record of quality standard evaluation of literature.

Task 3: Technical subject matter, writing, and revision assistance- well injection chapter

The Contractor shall take a lead role in revising the Well Injection chapter (~70 pages with figures and references) and its supporting appendix (~15 pages with references). This shall require knowledge and expertise in areas such as oil and gas drilling, hydraulic fracturing, petroleum engineering, well construction, geology and geomechanics. The Contractor shall revise the chapter in response to SAB and public review comments and to EPA review. Revisions will include updating and adding sources of information to reflect the most current and relevant literature, revising current graphics as requested (~10 in current chapter and appendix), and reviewing/revising content in the Executive Summary and Synthesis chapter that draws on material from this chapter. The Contractor shall also contribute to the development of documents and spreadsheets that detail how EPA responded to SAB and public comments about this chapter.

The Contractor shall assist the EPA in evaluating and tracking data, literature, reports and other documents cited in sections written under this task for compliance with quality standards under the *QAPP for Data and Literature Evaluation for EPA's Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources (Revision#2, November 2014)*. The current QAPP will be supplied by the EPA WACOR. For the current WA, the Contractor shall continue to use the protocols developed for the draft HFDWA, as provided by the EPA WACOR. If changes to the protocol are necessary, the Contractor shall discuss this with the EPA WACOR, and document any alterations made. Quality information shall be submitted for new references since the development of the draft HFDWA (likely to be in the 20-30 range). The Contractor shall endeavor to be efficient in executing the evaluation and tracking by, for example, relying on authors familiar with the references through their writing under this task.

Writing produced under this task shall utilize "Cite while you write" functionality of Endnote to embed references and link them back to the HERO database. Endnote software shall be provided by the Contractor. LitCiter, a necessary plug-in to Endnote and Word, will be provided to the Contractor and supported by HERO. Versions of Endnote and LitCiter may need to be updated periodically to ensure functionality.

Contractor experts leading work under this task shall attend monthly 1 hr phone calls of the HFDWA team, bi-weekly 1 hr calls of the chapter leads, and coordinate with other members of the HFDWA team on content and scope on an as needed basis.

The contractor lead shall also be required to attend teleconferences of SAB deliberations on the HFDWA, as well as attend the SAB in-person meeting in Washington, DC October 28-30, 2015.

Deliverables: Draft chapter revised to address SAB and public comments; subsequent draft revised to address EPA management review comments; draft and final response to comments spreadsheets; record of quality standard evaluation of literature.

Task 4: Technical subject matter, writing, and revision assistance- wastewater treatment and waste disposal chapter

The Contractor shall take a lead role in revising and finalizing the Wastewater Treatment and Waste Disposal chapter (~85 pages with figures and references) and its supporting appendix (~30 pages with references). This shall require knowledge and expertise in areas such as chemistry, wastewater treatment engineering, and drinking water treatment technologies. The Contractor shall revise the chapter in response to SAB and public review comments and to EPA review. Revisions shall include updating and adding sources of information to reflect the most current and relevant literature, revising current graphics as requested (~15 in chapter and appendix), and reviewing/revising content in the Executive Summary and Synthesis chapter that draws on material from this chapter. The Contractor shall also contribute to the development of documents and spreadsheets that detail how EPA responded to SAB and public comments about this chapter.

The Contractor shall assist the EPA in evaluating and tracking data, literature, reports and other documents cited in sections written under this task for compliance with quality standards under the *QAPP for Data and Literature Evaluation for EPA's Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources (Revision#2, November 2014)*. The current QAPP will be supplied by the EPA WACOR. For the current WA, the Contractor shall continue to use the protocols developed for the draft HFDWA, as provided by the EPA WACOR. If changes to the protocol are necessary, the Contractor shall discuss this with the EPA WACOR, and document any alterations made. Quality information shall be submitted for new references since the development of the draft HFDWA (likely to be in the 20-30 range). The Contractor shall endeavor to be efficient in executing the evaluation and tracking by, for example, relying on authors familiar with the references through their writing under this task.

Writing produced under this task shall utilize "Cite while you write" functionality of Endnote to embed references and link them back to the HERO database. Endnote software shall be provided by the Contractor. LitCiter, a necessary plug-in to Endnote and Word, will be provided to the Contractor and supported by HERO. Versions of Endnote and LitCiter may need to be updated periodically to ensure functionality.

Contractor experts leading work under this task shall attend monthly 1 hr phone calls of the HFDWA team, bi-weekly 1 hr calls of the chapter leads, and coordinate with other members of the HFDWA team on content and scope on an as needed basis.

The lead shall also be required to attend teleconferences of SAB deliberations on the HFDWA, as well as attend the SAB in-person meeting in Washington, DC October 28-30, 2015.

Deliverables: Draft chapter revised to address SAB and public comments; subsequent draft revised to address EPA management review comments; draft and final response to comments spreadsheets; record of quality standard evaluation of literature.

IV. SCHEDULE OF DELIVERABLES

TASK No.	DELIVERABLE	DATE DUE TO EPA
Task 0: Work Plan and Monthly Progress Reports		
	Workplan, budget, and QA supplemental	According to contract
	SQAPP	Within 2 weeks of initiation of WA
	Monthly progress reports	Monthly
Task 1: Technical subject matter, writing, and revision assistance- general support		
	Draft designated analyses and written portions of the HFDWA	In accordance with written technical direction
	Final designated analyses and written portions of the HFDWA	In accordance with written technical direction
	Record of quality standard evaluation of literature	In accordance with written technical direction
Task 3: Technical subject matter, writing, and revision assistance- HF, oil/gas background chapter		
	Draft chapter revised to address SAB and public comments	In accordance with written technical direction
	Draft chapter revised to address EPA management review comments	In accordance with written technical direction
	Draft summary of proposed responses to SAB and public comments on the chapter	In accordance with written technical direction
	Final summary of proposed responses to SAB and public comments on the chapter	In accordance with written technical direction
	Record of quality standard evaluation of literature	In accordance with written technical direction
Task 3: Technical subject matter, writing, and revision assistance- well injection chapter		
	Draft chapter revised to address SAB and public comments	In accordance with written technical direction
	Draft chapter revised to address EPA management review comments	In accordance with written technical direction
	Draft summary of proposed responses to SAB and public comments on the chapter	In accordance with written technical direction
	Final summary of proposed responses to SAB and public comments on the chapter	In accordance with written technical direction
	Record of quality standard evaluation of literature	In accordance with written technical direction
Task 4: Technical subject matter, writing, and revision assistance- wastewater treatment and waste disposal chapter		
	Draft chapter revised to address SAB and public comments	In accordance with written technical direction
	Draft chapter revised to address EPA management review comments	In accordance with written technical direction
	Draft summary of proposed responses to SAB and public comments on the chapter	In accordance with written technical direction

TASK No.	DELIVERABLE	DATE DUE TO EPA
	Final summary of proposed responses to SAB and public comments on the chapter	In accordance with written technical direction
	Record of quality standard evaluation of literature	In accordance with written technical direction

V. MISCELLANEOUS

Software Application Files and Accessibility

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: <http://www.section508.gov/>

Preferred text format:	MS Word, 8.0 or higher (Office 2003 or higher)
Preferred presentation format:	Power Point, Office 2003 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0

TRAVEL

No travel is anticipated under this work assignment. If the need for travel arises, the WACOR will work with the CL COR and the CO to amend this work assignment to allow for travel.

CONTRACTOR IDENTIFICATION

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the CO, PO and/or WACOR.

PRINTING

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

VI. Quality Assurance Surveillance Plan

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WAM based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards. Additional project specific quality assurance surveillance plan requirements are identified below.

<u>Performance Requirements</u>	<u>Performance Standards</u>	<u>Surveillance Methods</u>
Performance Standards are applicable to all PWS requirements and will be utilized to determine eligibility for Award Term Options.		

<p><u>Programmatic Requirement:</u> The contractor shall develop products that are based on best available information and resources.</p>	<p><u>Programmatic Standard:</u> Outputs are based on best available information and resources; Documentation of sources used, not used, and limitations of available data.</p>	<p>EPA will review all products for conformance with the requirements of the SDWA Amendments, Clean Water Act and other related mandates, including Small Business Regulatory Enforcement Fairness Act 1996 (SBREFA) and Unfunded Mandates Reform Act of 1995 (UMRA).</p>
<p><u>Cost Control Requirement</u> The contractor shall perform all work in an efficient and cost effective manner, applying cost control measures where practical.</p>	<p><u>Cost Control Standard:</u> Implementation of cost control system to monitor and track project status, that indicate level of budget utilized and forecast remaining budget needs to complete project. The contractor shall notify project COR immediately in cases where issues impact project cost are identified.</p>	<p>The EPA Project Officer will routinely discuss the work progress and contract level and work assignment expenditures with the Project Manager. The WAM will maintain regular contact with the contractor's designated work assignment /project manager to discuss work assignment progress and expenditures and will review and verify expenditures and technical progress before invoice payments are authorized.</p>
<p><u>Schedule Requirement</u> The contractor shall provide services and submit deliverables in accordance with approved work assignment milestone and deliverable schedules.</p>	<p><u>Schedule Standard:</u> Services and deliverables shall be in accordance with schedules stated in each work assignment. Unless amended or modified by an approved EPA action, a deliverable that is received 7-days past the due date, will be considered unsatisfactory performance.</p>	<p>EPA will closely monitor task milestone and deliverable schedules and review the Contract Monthly Progress Reports and any special reporting requirements to compare actual delivery dates to those approved in the work assignment.</p>
<p><u>Document Development Requirement:</u> The contractor shall provide documents that are technically and factually accurate, and suited to the intended audience.</p>	<p><u>Document Development Standard:</u> Information to be disseminated by EPA will meet the requirements of OMB's "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity for Information Disseminated by Federal Agencies (67 FR 8451)</p>	<p>The WAM will review drafts to assess technical accuracy and editorial quality. The WAM will identify all inaccuracies and needed edits and corrections to the contractor in the initial review of draft documents</p>

VII. CONFLICT OF INTEREST

The Contractor shall adhere to the following:

(a) The Contractor warrants that, to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, or that the Contractor has disclosed all such relevant information.

(b) Prior to commencement of any work, the Contractor agrees to notify the Contracting Officer immediately that, to the best of its knowledge and belief, no actual or potential conflict of interest exists or to identify to the Contracting Officer any actual or potential conflict of interest the firm may have.

(c) The Contractor agrees that if an actual or potential organizational conflict of interest is identified during performance, the Contractor will immediately make a full disclosure in writing to the Contracting Officer. This disclosure shall include a description of actions which the Contractor has taken or proposes to take, after consultation with the Contracting Officer, to avoid, mitigate, or neutralize the actual or potential conflict of interest. The Contractor shall continue performance until notified by the Contracting Officer of any contrary action to be taken.

(d) Remedies - The EPA may terminate this contract for convenience, in whole or in part, if it deems such termination necessary to avoid an organizational conflict of interest. If the Contractor was aware of a potential organizational conflict of interest prior to award or discovered an actual or potential conflict after award and did not disclose it or misrepresented relevant information to the Contracting Officer, the Government may terminate the contract for default, debar the Contractor from Government contracting, or pursue such other remedies as may be permitted by law or this contract.

(e) The Contractor agrees to insert in each subcontract or consultant agreement placed here under provisions which shall conform substantially to the language of this clause, including this paragraph, unless otherwise authorized by the Contracting Officer.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 0-83				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000001				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2022 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name HF Drinking Water Assessment				
Contractor Cadmus Group, Inc., The					Specify Section and paragraph of Contract SOW 4.3					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 09/10/2015 To 06/30/2016				
Comments: The purpose of this amendment 1 to Cadmus (EP-C-15-022) WA 0-83 is to 1) update the QASP to match the contract level QASP; and 2) to restore the FedConnect released Amendment 1 issued 9/10/15., which replaced the original PWS. The PWS was subsequently replaced in the restored Work Assignment 0-83 issued 9/15/15.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:			LOE:					
09/01/2015 To 06/30/2022										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Caroline Ridley <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code:			
							Phone Number 703-347-8506			
							FAX Number:			
Project Officer Name Nancy Parrotta <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code:			
							Phone Number: 202-564-5260			
							FAX Number:			
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code:			
							Phone Number:			
							FAX Number:			
Contracting Official Name Courtney Stallworth <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code:			
							Phone Number: 513-487-2002			
							FAX Number:			

Quality Assurance Surveillance Plan
EP-C-15-022 WA 0-83

<u>Performance Requirement</u>	<u>Measureable Performance Standards</u>	<u>Surveillance Methods</u>	<u>Incentives/Disincentives</u>
<u>Programmatic Standard:</u> Outputs are based on best available information and resources; Documentation of sources used, not used, and limitations of available data; Description of methodological choices made both conceptually and in data selection. Assumptions utilized in environmental planning and applying engineering principles are clearly documented.	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	EPA will review all products for conformance with the requirements of the SDWA Amendments, Clean Water Act and other related mandates, including Small Business Regulatory Enforcement Fairness Act 1996 (SBREFA) and Unfunded Mandates Reform Act of 1995 (UMRA).	<p>Two or more work assignments per contract period where the contractor does not meet the measureable performance standard will be considered unsatisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Management.</p> <p>Fewer than two work assignments per contract period where the contractor does not meet the measureable performance standard will be considered satisfactory performance and will be reported as such in the CPARS Performance Evaluation System under the category of Management.</p>
<u>Cost Control Standard:</u> Implementation of cost control system to monitor and track project status, that indicate level of budget utilized and forecast remaining budget needs to complete project. The contractor shall notify project COR immediately in cases where issues impact project cost are identified. The contractor shall provide a risk management strategy that identifies specific project element(s) that adversely impact proposed work plan. The risk management strategy shall present impacts if course is continued without mitigation, and solutions to resolve the issue(s). The risk Management Strategy	The contractor shall manage costs to the level of the approved ceiling on each individual WA. The contractor shall notify the EPA WACOR, CL COR, and CO when 75% of the approved funding ceiling for any particular WA is reached. If a contractor fails to manage and control cost, any resultant overrun cannot exceed the total contract obligation for that period.	The EPA CL COR will routinely discuss the work progress and contract level and individual task order expenditures with the Project Manager. The WACOR will maintain regular contact with the Contractor's designated task order manager/project manager to discuss task order progress and expenditures and will review and verify expenditures and technical progress before invoice payments are authorized.	<p>If the contractor does not meet the measurable performance standards per contract period it will be assigned a rating of Unsatisfactory in CPARS under the category of Cost Control.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Cost Control if the contractor meets the measureable performance standards and accurately reports the costs in the progress reports according to the requirements in the "Reports of Work" attachment to the RFP.</p>

Quality Assurance Surveillance Plan
EP-C-15-022 WA 0-83

shall consider process, schedule, prioritization, and cost benefit analysis.			
<p><u>Schedule Standard:</u> Services and deliverables shall be in accordance with schedules stated in each task order. Unless amended or modified by an approved EPA action, a deliverable that is received 7-days past the due date, will be considered unsatisfactory performance.</p>	No more than 15% of all deliverables per WA shall be submitted more than 3 work days past the due date.	EPA will closely monitor task milestone and deliverable schedules and review the Contract Monthly Progress Reports and any special reporting requirements to compare actual delivery dates to those approved in task orders. EPA will notify the contractor when it becomes apparent that an established schedule will not be met.	<p>If the contractor does not meet the measurable performance standards per WA it will be assigned a rating of Unsatisfactory in CPARS under the category of Schedule.</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Schedule if the contractor meets the measureable performance standards.</p>
<p><u>Document Development:</u> Documents shall be technically and factually accurate, and suited to the intended audience. The draft version of a document shall meet a standard of no more than 2 typographical and/or grammatical errors per page and require no more than two editorial revisions. Final documents must meet a standard of no more than 2 typographical and/or grammatical errors per document.</p>	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	The WAC will review drafts to assess technical accuracy and editorial quality. The WACOR will identify all inaccuracies and needed edits and corrections to the Contractor in the initial review of draft documents	<p>If the contractor does not meet the measurable performance standards per work assignment it will be assigned a rating of Unsatisfactory in CPARS under the category of Technical (Quality of Product).</p> <p>A satisfactory rating will be reported in the CPARS Performance Evaluation System under the category of Technical (Quality of Product) if the contractor meets the measureable performance standards.</p>

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 0-83				
						<input type="checkbox"/> Other <input checked="" type="checkbox"/> Amendment Number: 000002				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2016 Base <input checked="" type="checkbox"/> Option Period Number			Title of Work Assignment/SF Site Name HF Drinking Water Assessment				
Contractor Cadmus Group, Inc., The					Specify Section and paragraph of Contract SOW 4.3					
Purpose: <input type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input checked="" type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 11/17/2015 To 06/30/2016				
Comments: The purpose of this amendment 2 to Cadmus (EP-C-15-022) WA 0-83 is to clarify scope of work under Tasks 1-4 based on updated information on the tasks required. This will reduce LOE required, including eliminating several deliverables. EPA is requesting an updated cost estimate.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO (Max 2) <input type="checkbox"/>										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code (Max 7)
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:			LOE:					
09/01/2015 To 06/30/2016										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee:			LOE:			
Cumulative Approved:				Cost/Fee:			LOE:			
Work Assignment Manager Name Caroline Ridley							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number 703-347-8506			
							FAX Number:			
Project Officer Name Nancy Parrotta							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 202-564-5260			
							FAX Number:			
Other Agency Official Name							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number:			
							FAX Number:			
Contracting Official Name Tammy Adams							Branch/Mail Code:			
_____ (Signature) (Date)							Phone Number: 513-487-2030			
							FAX Number: 513-487-2545			

**PERFORMANCE WORK STATEMENT
EP-C-15-022
Work Assignment No. 0-83- Amendment 2**

I. ADMINISTRATIVE:

A. Title: Technical Support for the Hydraulic Fracturing Drinking Water Assessment

B. Work Assignment COR:

Alternate Work Assignment COR:

**Caroline Ridley
National Center for Environmental
Assessment
Washington Division/Office of Research
and Development
1200 Pennsylvania Ave., NW (MC: 8623P)
Washington, DC 20460
Phone: (703) 347-8506
FAX: (703) 347-8692
E-mail: ridley.caroline@epa.gov**

**Stephen LeDuc
National Center for Environmental
Assessment
Washington Division/Office of Research
and Development
1200 Pennsylvania Ave., NW (MC: 8623P)
Washington, DC 20460
Phone: (703) 347- 8962
FAX: (703) 347-8692
E-mail: leduc.stephen@epa.gov**

Period of performance: Initiation of WA-June 30, 2016

The purpose of this amendment is to clarify the scope of work under Tasks 1-4 based upon updated information on the tasks required. This will reduce the LOE required and includes eliminating several deliverables. EPA is requesting an updated budget.

Task 0: Work Plan and Monthly Progress Reports

No change.

Task 1: Technical subject matter, writing, and revising assistance- general support

The Hydraulic Fracturing Drinking Water Assessment (HFDWA) will require an understanding of the literature on a variety of technical subjects, including, but not limited to: drilling for oil and gas; hydraulic fracturing; petroleum engineering; surface water and groundwater chemistry; environmental- and geo-chemistry; chemical fate and transport chemistry; toxicology; surface hydrology; groundwater and vadose zone hydrology; groundwater-surface-water interactions; and geology. The Contractor shall provide technical experts in these fields according to the needs of the assessment. These Contractor experts shall assist in reading and extracting information from the relevant literature, revising/reworking up to 3 data analyses and synthesizing results (e.g., GIS synthesis; chemical use from FracFocus 1.0), and technical writing for the HFDWA. Contractor personnel shall work closely with EPA chapter-leads in designing and executing data analyses, in writing designated portions of the HFDWA, and in implementing revisions to analyses, text, and figures (~30 excluding those in chapters referenced below) in response to the

Science Advisory Board (SAB) and public comments and EPA review (that are not included in Tasks 2-4). Total original pages written under this task will likely be <10.

The Contractor shall assist the EPA in evaluating and tracking data, literature, reports and other documents considered for citation in sections written under this task for compliance with quality standards under the *QAPP for Data and Literature Evaluation for EPA's Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources (Revision#2, November 2014)*. The current QAPP will be supplied by the EPA WACOR. For the current WA, the Contractor shall continue to use the protocols developed for the draft HFDWA, as provided by the EPA WACOR. If changes to the protocol are necessary, the Contractor shall discuss this with the EPA WACOR, and document any alterations made. Quality information shall be submitted for new references to the draft HFDWA (likely to be in the 10-15 range). The Contractor shall endeavor to be efficient in executing the evaluation and tracking by, for example, relying on authors familiar with the references through their writing under this task.

Writing produced under this task will utilize "Cite while you write" functionality of Endnote to embed references and link them back to the HERO database. Endnote software shall be provided by the Contractor. LitCiter, a necessary plug-in to Endnote and Word, will be provided to the Contractor and supported by HERO. Versions of Endnote and LitCiter may need to be updated periodically to ensure functionality.

Experts leading work under this task are also required to attend monthly 1 hour phone calls of the HFDWA team.

Deliverables: Draft and final designated analyses and written portions of the HFDWA; record of quality standard evaluation of literature.

Task 2: Technical subject matter, writing, and revision assistance- HF and oil/gas background chapter

The Contractor shall take a lead role in revising the Hydraulic Fracturing, Oil and Gas Production, and the US Energy Sector chapter (~35 pages with figures and references) with guidance from the WACOR. This shall require knowledge and expertise in all areas of the hydraulic fracturing water cycle and the history of oil and gas production technologies and trends. The Contractor shall revise the chapter in response to SAB and public review comments and to EPA review. Based on preliminary comments received, the Contractor shall assume only minor revisions will be required. Minor revisions shall include updating and adding sources of information to reflect the most current and relevant literature, revising current graphics as requested (~20 in current draft chapter), and reviewing/revising content in the Executive Summary and Synthesis chapter that draws on material from this chapter. The Contractor shall also contribute to the development of documents and spreadsheets that detail how EPA responded to SAB and public comments about this chapter.

The Contractor shall assist the EPA in evaluating and tracking data, literature, reports and other documents cited in sections written under this task for compliance with quality standards under the *QAPP for Data and Literature Evaluation for EPA's Study of the Potential Impacts of*

Hydraulic Fracturing on Drinking Water Resources (Revision#2, November 2014). The current QAPP will be supplied by the EPA WACOR. For the current WA, the Contractor shall continue to use the protocols developed for the draft HFDWA, as provided by the EPA WACOR. If changes to the protocol are necessary, the Contractor shall discuss this with the EPA WACOR, and document any alterations made. Quality information shall be submitted for new references since the development of the draft HFDWA (likely to be in the 10-15 range). The Contractor shall endeavor to be efficient in executing the evaluation and tracking by, for example, relying on authors familiar with the references through their writing under this task.

Writing produced under this task shall utilize “Cite while you write” functionality of Endnote to embed references and link them back to the HERO database. Endnote software shall be provided by the Contractor. LitCiter, a necessary plug-in to Endnote and Word, will be provided to the Contractor and supported by HERO. Versions of Endnote and LitCiter may need to be updated periodically to ensure functionality.

Experts leading work under this task are also required to attend monthly 1 hour phone calls of the HFDWA team, bi-weekly 1 hour calls of the chapter leads, and coordinate with other members of the HFDWA team on content and scope on an as needed basis.

The lead shall also be required to attend teleconferences of SAB deliberations on the HFDWA, as well as attend the SAB in-person meeting in Washington, DC October 28-30, 2015.

Deliverables: Draft chapter revised to address SAB and public comments; draft response to comments spreadsheets; record of quality standard evaluation of literature.

Task 3: Technical subject matter, writing, and revision assistance- well injection chapter

The Contractor shall take a lead role in revising the Well Injection chapter (~70 pages with figures and references) and its supporting appendix (~15 pages with references). This shall require knowledge and expertise in areas such as oil and gas drilling, hydraulic fracturing, petroleum engineering, well construction, geology and geomechanics. The Contractor shall revise the chapter in response to SAB and public review comments and to EPA review. Based on preliminary comments received, the Contractor shall assume significant revisions will be required. Revisions will include updating and adding sources of information to reflect the most current and relevant literature, revising current graphics as requested (~10 in current chapter and appendix), and reviewing/revising content in the Executive Summary and Synthesis chapter that draws on material from this chapter. The Contractor shall also contribute to the development of documents and spreadsheets that detail how EPA responded to SAB and public comments about this chapter.

The Contractor shall assist the EPA in evaluating and tracking data, literature, reports and other documents cited in sections written under this task for compliance with quality standards under the *QAPP for Data and Literature Evaluation for EPA’s Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources (Revision#2, November 2014)*. The current QAPP will be supplied by the EPA WACOR. For the current WA, the Contractor shall continue

to use the protocols developed for the draft HFDWA, as provided by the EPA WACOR. If changes to the protocol are necessary, the Contractor shall discuss this with the EPA WACOR, and document any alterations made. Quality information shall be submitted for new references since the development of the draft HFDWA (likely to be in the 20-30 range). The Contractor shall endeavor to be efficient in executing the evaluation and tracking by, for example, relying on authors familiar with the references through their writing under this task.

Writing produced under this task shall utilize “Cite while you write” functionality of Endnote to embed references and link them back to the HERO database. Endnote software shall be provided by the Contractor. LitCiter, a necessary plug-in to Endnote and Word, will be provided to the Contractor and supported by HERO. Versions of Endnote and LitCiter may need to be updated periodically to ensure functionality.

Contractor experts leading work under this task shall attend monthly 1 hour phone calls of the HFDWA team, bi-weekly 1 hour calls of the chapter leads, and coordinate with other members of the HFDWA team on content and scope on an as needed basis.

The contractor lead shall also be required to attend teleconferences of SAB deliberations on the HFDWA, as well as attend the SAB in-person meeting in Washington, DC October 28-30, 2015.

Deliverables: Draft chapter revised to address SAB and public comments; draft response to comments spreadsheets; record of quality standard evaluation of literature.

Task 4: Technical subject matter, writing, and revision assistance- wastewater treatment and waste disposal chapter

The Contractor shall take a lead role in revising and finalizing the Wastewater Treatment and Waste Disposal chapter (~85 pages with figures and references) and its supporting appendix (~30 pages with references). This shall require knowledge and expertise in areas such as chemistry, wastewater treatment engineering, and drinking water treatment technologies. The Contractor shall revise the chapter in response to SAB and public review comments and to EPA review. Based on preliminary comments received, the Contractor shall assume moderate revisions will be required. Moderate revisions shall include updating and adding sources of information to reflect the most current and relevant literature, revising current graphics as requested (~15 in chapter and appendix), and reviewing/revising content in the Executive Summary and Synthesis chapter that draws on material from this chapter. The Contractor shall also contribute to the development of documents and spreadsheets that detail how EPA responded to SAB and public comments about this chapter.

The Contractor shall assist the EPA in evaluating and tracking data, literature, reports and other documents cited in sections written under this task for compliance with quality standards under the *QAPP for Data and Literature Evaluation for EPA’s Study of the Potential Impacts of Hydraulic Fracturing on Drinking Water Resources (Revision#2, November 2014)*. The current QAPP will be supplied by the EPA WACOR. For the current WA, the Contractor shall continue to use the protocols developed for the draft HFDWA, as provided by the EPA WACOR. If

changes to the protocol are necessary, the Contractor shall discuss this with the EPA WACOR, and document any alterations made. Quality information shall be submitted for new references since the development of the draft HFDWA (likely to be in the 20-30 range). The Contractor shall endeavor to be efficient in executing the evaluation and tracking by, for example, relying on authors familiar with the references through their writing under this task.

Writing produced under this task shall utilize “Cite while you write” functionality of Endnote to embed references and link them back to the HERO database. Endnote software shall be provided by the Contractor. LitCiter, a necessary plug-in to Endnote and Word, will be provided to the Contractor and supported by HERO. Versions of Endnote and LitCiter may need to be updated periodically to ensure functionality.

Contractor experts leading work under this task shall attend monthly 1 hour phone calls of the HFDWA team, bi-weekly 1 hour calls of the chapter leads, and coordinate with other members of the HFDWA team on content and scope on an as needed basis.

The lead shall also be required to attend teleconferences of SAB deliberations on the HFDWA, as well as attend the SAB in-person meeting in Washington, DC October 28-30, 2015.

Deliverables: Draft chapter revised to address SAB and public comments; draft response to comments spreadsheets; record of quality standard evaluation of literature.

IV. SCHEDULE OF DELIVERABLES

TASK No.	DELIVERABLE	DATE DUE TO EPA
Task 0: Work Plan and Monthly Progress Reports		
	Workplan, budget, and QA supplemental	According to contract
	SQAPP	Within 2 weeks of initiation of WA
	Monthly progress reports	Monthly
Task 1: Technical subject matter, writing, and revision assistance- general support		
	Draft designated analyses and written portions of the HFDWA	In accordance with written technical direction
	Final designated analyses and written portions of the HFDWA	In accordance with written technical direction
	Record of quality standard evaluation of literature	In accordance with written technical direction
Task 3: Technical subject matter, writing, and revision assistance- HF, oil/gas background chapter		
	Draft chapter revised to address SAB and public comments	In accordance with written technical direction
	Draft summary of proposed responses to SAB and public comments on the chapter	In accordance with written technical direction
	Record of quality standard evaluation of literature	In accordance with written technical direction

TASK No.	DELIVERABLE	DATE DUE TO EPA
Task 3: Technical subject matter, writing, and revision assistance- well injection chapter		
	Draft chapter revised to address SAB and public comments	In accordance with written technical direction
	Draft summary of proposed responses to SAB and public comments on the chapter	In accordance with written technical direction
	Record of quality standard evaluation of literature	In accordance with written technical direction
Task 4: Technical subject matter, writing, and revision assistance- wastewater treatment and waste disposal chapter		
	Draft chapter revised to address SAB and public comments	In accordance with written technical direction
	Draft summary of proposed responses to SAB and public comments on the chapter	In accordance with written technical direction
	Record of quality standard evaluation of literature	In accordance with written technical direction

V. MISCELLANEOUS – No change

TRAVEL

No change.

CONTRACTOR IDENTIFICATION

Contractor personnel shall always identify themselves as contractor employees by name and organization and physically display that information through an identification badge. Contractor personnel are prohibited from acting as the Agency's official representative. The contractor shall refer any questions relating to the interpretation of EPA policy, guidance, or regulation to the CO, PO and/or WACOR.

PRINTING

All copying and printing shall be accomplished within the limitations of the printing clause of the contract.

VI. Quality Assurance Surveillance Plan – No Change

VII. CONFLICT OF INTEREST

No change.

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-84				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2017 Base Option Period Number 1			Title of Work Assignment/SF Site Name SDWA Inspector Training				
Contractor CADMUS GROUP, INC., THE					Specify Section and paragraph of Contract SOW 3.4, 7.2					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 11/02/2016 To 06/30/2017				
Comments: In accordance with contract clause B.1 EPAAR 1552.211-74 Work Assignments (DEC 2014) ALT III (DEC 2014). Immediate start is authorized for the subject WA. However, if the Work plan is not approved within 35 days of the signed WA the contractor shall stop work under this work assignment.										
<input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund										
SFO <input type="checkbox"/> Note: To report additional accounting and appropriations date use EPA Form 1900-69A.										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:		LOE:						
09/01/2015 To 06/30/2017				0						
This Action:				315						
Total:				315						
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee		LOE:				
Cumulative Approved:				Cost/Fee		LOE:				
Work Assignment Manager Name Kenneth Harmon <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-7049 FAX Number:				
Project Officer Name Nancy Parrotta <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:				
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: FAX Number:				
Contracting Official Name Donna Reinhart <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>						Branch/Mail Code: Phone Number: 513-487-2114 FAX Number:				

PERFORMANCE WORK STATEMENT
Cadmus EP-C-15-022
Work Assignment No. 1-84

I. ADMINISTRATIVE:

A. Title: **Support for SDWA Inspector Training**

**B. Work Assignment Contracting
Officer's Representative (WACOR):**

Kenneth Harmon
Office of Compliance
1200 Pennsylvania Avenue, NW
(MC: 2227 A)
Washington, DC 20460
202-564-7049
Harmon.kenneth@epa.gov

Alternate WWACOR:

NONE

C. Quality Assurance:

The tasks in this work assignment do not require quality assurance (QA). Consistent with the Agency's QA requirements, the contractor does not need to supplement the Contract Quality Assurance Project Plan (QAPP) or to prepare a Project Specific Quality Assurance project Plan (PQAPP).

D. Background:

Under the authority of the Safe Drinking Water Act (SDWA), the Environmental Protection Agency (EPA) has jurisdiction over public water systems (PWSs), both stationary and those that serve water for consumption on Interstate Carrier Conveyances (ICCs) such as aircraft. All SDWA inspectors are required to complete sanitary survey training. SDSWA inspectors are also required to complete rule-specific training relevant to the inspection being conducted. EPA promulgated a rule specific to aircraft PWSs, the Aircraft Drinking Water Rule (ADWR) on October 19, 2009 (40 CFR Part 41, Subpart X).

II. OBJECTIVE:

Under this work assignment (WA), the contractor will build on work performed under Work Assignment No. 0-84. Specifically, the contractor will complete work on a computer-based training module to support the efforts of EPA's Office of Compliance (OC) to develop training needed to certify Agency inspectors to conduct aircraft inspections. Also under this work assignment, the contractor will deliver on session of face-to-face sanitary survey training in Washington, DC. Additionally, the contractor will support EPA's efforts to develop a computer-based sanitary survey refresher course.

III. TASK DETAIL:

All direction under this work assignment will be provided as written technical direction from the WACOR, as appropriate. If provided first as verbal technical direction to the contractor, it will be confirmed in writing within 5 calendar days, with a copy to the Contract Level COR (CLCOR) and the Contracting Officer, and is subject to the limitations of the technical direction contract clause. Each initial deliverable shall be provided to the EPA WACOR and EPA CLCOR in draft form for review and comment. The contractor shall incorporate WACOR review comments into revisions of the drafts. All drafts and final reports shall be approved by the WACOR.

The tasks under this work assignment do not require the acquisition of “off-site” facilities for conferences and meetings as defined in the IPN 12-05 and the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

The contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

The contractor shall perform the following tasks:

Task 0 – Work Plan Submission

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor’s key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs. In addition, the work plan shall specify that a Supplemental Project Specific Quality Assurance Project Plan (SQAPP) appending the Contract QAPP or a PQAPP is not required. This task also includes monthly progress and financial reports. Monthly financial reports must include a table with the invoice LOE and cost amount broken out by the tasks in this WA.

Deliverables: Work plan and monthly progress and financial reports.

Task 1 – Support for Developing Computer-Based Aircraft Inspector Training

OC staff are using CAPTIVATE software to develop a computer-based training module that will be used to certify that SDWA inspectors have the necessary knowledge to inspect an aircraft inspection to determine compliance with the ADWR. At the direction of the COR, the contractor shall provide support for this effort. The contractor shall provide technical support to OC as it finalizes the training module for loading onto EPA’s internal website. Specific tasks will be assigned by the WACOR through technical direction. For the purposes of proposal preparation,

the contractor shall assume 20 to 40 hours of technical support as OC finalizes the training module.

Deliverables: Technical assistance as EPA finalizes and loads the training module.

Task 2 – Support for Developing Computer-based Sanitary Survey Training

OC staff are using CAPTIVATE software to develop a computer-based training module that will be used as a refresher class for SDWA inspectors who are preparing to conduct inspections of public water systems. At the direction of the COR, the contractor shall provide support for this effort. The contractor shall provide technical support to OC as it finalizes the training module for loading onto EPA’s internal website. Specific tasks will be assigned by the WACOR through technical direction. For the purposes of proposal preparation, the contractor shall assume 30 to 40 hours of training module review and evaluation, 24 to 36 hours preparing and providing written and verbal comments to OC, and 20 to 40 hours of technical support as OC finalizes the training module.

Deliverables: Technical assistance as EPA finalizes and loads the training module

Task 4 – Delivery of Sanitary Survey Training

Upon written technical direction of the WACOR, the contractor shall send a team of two trainers to Washington, DC, to deliver sanitary survey training on no more than one week in length. EPA will provide the classroom training space. The contractor shall provide training with respect to both ground water and surface water public water systems and will include field visits to both a ground water system and a surface water system to demonstrate how a sanitary survey is performed at a public water system of that source water type. The goal of the training is to certify participants to perform sanitary surveys.

Deliverables: One multi-day sanitary survey training incorporating field visits to a public water system that uses a ground water source and to a public water system that uses a surface water source. Qualifying participants will receive certification to perform sanitary surveys.

IV. SCHEDULE OF DELIVERABLES:

TASK No.	DELIVERABLE	DATE DUE TO EPA
Task 0: Workplan Submission		
	Workplan, budget, and QA supplemental	According to contract.
	Monthly progress reports	Monthly
Task 1: Support for Developing Computer-Based Aircraft Inspector Training		
	Technical assistance in finalizing and loading the Training module.	Within two weeks of receiving written technical direction from COR
Task 2: Support for Developing Computer-based Sanitary Survey Training		

	Technical assistance in finalizing and loading the Training module.	Within two weeks of receiving written technical direction from COR.
Task 3: Face-to-Face Sanitary Survey Training		
	Delivery of Training in the Washington, DC area.	Within two weeks after receipt of written technical direction from COR

V. MISCELLANEOUS

Software Application Files and Accessibility

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: <http://www.section508.gov/>

Preferred text format:	MS Word, 8.0 or higher (Office 2003 or higher)
Preferred presentation format:	Power Point, Office 2003 or higher
Preferred graphics format:	Each graphic is an individual GIF file
Preferred portable format:	Adobe Acrobat, version 6.0
Preferred computer training application/format:	CAPTIVATE

VI. Quality Assurance Surveillance Plan

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards. Additional project specific quality assurance surveillance plan requirements are identified below.

<u>Performance Requirements</u>	<u>Performance Standards</u>	<u>Surveillance Methods</u>
Performance Standards are applicable to all PWS requirements and will be utilized to determine eligibility for Award Term Options.		
<u>Programmatic Requirement:</u> The contractor shall develop products that are based on best available information and resources.	<u>Programmatic Standard:</u> Outputs are based on best available information and resources; Documentation of sources used, not used, and limitations of available data.	EPA will review all products for conformance with the requirements of the SDWA Amendments, Clean Water Act and other related mandates, including Small Business Regulatory Enforcement Fairness Act 1996 (SBREFA) and Unfunded Mandates

		Reform Act of 1995 (UMRA).
<p><u>Cost Control Requirement :</u></p> <p>The contractor shall perform all work in an efficient and cost effective manner, applying cost control measures where practical.</p>	<p><u>Cost Control Standard:</u></p> <p>Implementation of cost control system to monitor and track project status, that indicate level of budget utilized and forecast remaining budget needs to complete project. The contractor shall notify project WACOR immediately in cases where issues impact project cost are identified.</p>	<p>The EPA CLCOR will routinely discuss the work progress and contract level and work assignment expenditures with the Project Manager. The WACOR will maintain regular contact with the contractor's designated work assignment /project manager to discuss work assignment progress and expenditures and will review and verify expenditures and technical progress before invoice payments are authorized.</p>
<p><u>Schedule Requirement</u></p> <p>The contractor shall provide services and submit deliverables in accordance with approved work assignment milestone and deliverable schedules.</p>	<p><u>Schedule Standard:</u></p> <p>Services and deliverables shall be in accordance with schedules stated in each work assignment. Unless amended or modified by an approved EPA action, a deliverable that is received 7-days past the due date, will be considered unsatisfactory performance.</p>	<p>EPA will closely monitor task milestone and deliverable schedules and review the Contract Monthly Progress Reports and any special reporting requirements to compare actual delivery dates to those approved in the work assignment.</p>
<p><u>Document Development Requirement:</u></p> <p>The contractor shall provide documents that are technically and factually accurate, and suited to the intended audience.</p>	<p><u>Document Development Standard:</u></p> <p>Information to be disseminated by EPA will meet the requirements of OMB's "Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity for Information Disseminated by Federal Agencies (67 FR 8451)</p>	<p>The WACOR will review drafts to assess technical accuracy and editorial quality. The WACOR will identify all inaccuracies and needed edits and corrections to the contractor in the initial review of draft documents</p>

EPA United States Environmental Protection Agency Washington, DC 20460 Work Assignment						Work Assignment Number 1-90				
						<input type="checkbox"/> Other <input type="checkbox"/> Amendment Number:				
Contract Number EP-C-15-022			Contract Period 09/01/2015 To 06/30/2017 Base Option Period Number 1			Title of Work Assignment/SF Site Name Reg 9 Tech Supprt for Impl UIC				
Contractor CADMUS GROUP, INC., THE					Specify Section and paragraph of Contract SOW 4.3					
Purpose: <input checked="" type="checkbox"/> Work Assignment <input type="checkbox"/> Work Assignment Close-Out <input type="checkbox"/> Work Assignment Amendment <input type="checkbox"/> Incremental Funding <input type="checkbox"/> Work Plan Approval						Period of Performance From 07/01/2016 To 06/30/2017				
Comments:										
<div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> Superfund Accounting and Appropriations Data <input checked="" type="checkbox"/> Non-Superfund </div>										
Note: To report additional accounting and appropriations data use EPA Form 1900-69A.										
SFO <input type="checkbox"/> (Max 2)										
Line	DCN (Max 6)	Budget/FY (Max 4)	Appropriation Code (Max 6)	Budget Org/Code (Max 7)	Program Element (Max 9)	Object Class (Max 4)	Amount (Dollars)	(Cents)	Site/Project (Max 8)	Cost Org/Code
1										
2										
3										
4										
5										
Authorized Work Assignment Ceiling										
Contract Period:		Cost/Fee:				LOE:				
09/01/2015 To 06/30/2017										
This Action:										
Total:										
Work Plan / Cost Estimate Approvals										
Contractor WP Dated:				Cost/Fee			LOE:			
Cumulative Approved:				Cost/Fee			LOE:			
Work Assignment Manager Name Kate Rao <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 415-972-3533 FAX Number:			
Project Officer Name Nancy Parrotta <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 202-564-5260 FAX Number:			
Other Agency Official Name <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: FAX Number:			
Contracting Official Name Tammy Adams <div style="display: flex; justify-content: space-between;"> <div>_____ (Signature)</div> <div>_____ (Date)</div> </div>							Branch/Mail Code: Phone Number: 513-487-2030 FAX Number: 513-487-2545			

PERFORMANCE WORK STATEMENT

Contract: EP-C-15-022

Work Assignment No. 1-90

I. ADMINISTRATIVE

A. Title: Region 9 Technical Support for Implementation of the Underground Injection Control (UIC) Program, and Navajo Nation UIC Program

B. Work Assignment (WA) COR:

Kate Rao
Drinking Water Protection Section
USEPA Region 9
75 Hawthorne Street
Mail Code: WTR 3-2
San Francisco, CA 94105
Email: rao.kate@epa.gov
Phone: 415.972.3533
Fax: 415.947.3549

Alternate WACOR (as applicable)

Leslie Greenberg
Drinking Water Protection Section
USEPA Region 9
75 Hawthorne Street
Mail Code: WTR 3-2
San Francisco, CA 94105
Email: greenberg.leslie@epa.gov
Phone: 415.972.3349
Fax: 415.947.3549

C. Quality Assurance:

Tasks 1 - 5 in this work assignment require the use of primary and/or secondary data. Collection, use and analysis of data will be identical to the procedures described in the Supplemental Project Specific Quality Assurance Project Plan (SQAPP) completed under Task 0 of WA 0-90, consistent with the Agency's quality assurance (QA) requirements, appending the Contract Level Quality Assurance Project Plan (QAPP). The project specific quality assurance requirements must be addressed in the monthly progress reports as specified under Task 0, below.

D. Background:

The Safe Drinking Water Act requires the U.S. EPA to regulate underground injection of fluids through wells to protect the quality of underground sources of drinking water. This is done in part by issuing Underground Injection Control (UIC) Program permits to owners of underground injection wells. The UIC Program divides injection wells into six classes. The six classes are based on similarity in the fluids injected, activities, construction, injection depth, design, and operating techniques. This categorization ensures that wells with common design and operating techniques are required to meet appropriate performance criteria for protecting underground sources of drinking water (USDWs). Class I wells inject hazardous wastes, industrial non-hazardous liquids, or municipal wastewater beneath the lowermost USDW. Class II wells inject brines and other fluids associated with oil and gas production, and hydrocarbons for storage. They inject into either Class II Exempt Aquifers or into saline aquifers that are beneath the lowermost USDW. Class III wells inject fluids associated with solution mining of minerals into either Class III Exempt Aquifers or into saline aquifers that are beneath the lowermost USDW. Class IV wells inject hazardous or radioactive wastes into or above USDWs and are banned unless authorized under a federal or state ground water remediation project. Class V wells include all injection wells not included in Classes I-IV or VI. In general, Class V wells inject non-hazardous fluids into or above USDWs and are typically shallow, on-site disposal systems. However, there are some deep Class V wells that inject below USDWs. Class VI wells inject carbon dioxide captured from an industrial source into deep subsurface rock formations for long-term storage.

EPA utilizes contractor support to evaluate Class I, II, III, V, and VI Underground Injection Control permit applications, draft documents for proposed permit actions, provide technical assistance for permit implementation activities, conduct special studies and project technical reviews as directed and provide direct consultation to Region 9 or Navajo Nation UIC staff. Some application material may contain confidential business information (CBI). If CBI is noted, the WACOR will properly provide a notice of

contemplated disclosure of CBI to the applicant pursuant to 40 CFR Part 2, Sections 301 and 304, prior to providing the contractor the necessary technical direction for a given task under this WA.

II. OBJECTIVE

The contractor shall conduct the timely evaluation of approximately five (5) Underground Injection Control Permit Applications to determine administrative and technical completeness, support the development of documents for approximately three (3) proposed draft and final permit actions, provide technical assistance up to 10 hours per month for permit implementation activities, conduct 8 - 10 special studies or project technical reviews and provide up to 16 hours/month of consultation (on an as-needed, periodic basis) to Region 9 or Navajo Nation UIC staff. All of these actions pertain to the identification and protection of USDWs.

III. TASK DETAIL

The contractor shall perform the following tasks:

Task 0: Work Plan and Monthly Progress Reports

The contractor shall develop a work plan that describes how each task will be carried out. The work plan shall include a schedule, staffing plan, level of effort (LOE), and cost estimate for each task, the contractor's key assumptions on which staffing plan and budget are based, and qualifications of proposed staff. If a subcontractor(s) is proposed and subcontractors are outside the local metropolitan area, the contractor shall include information on plans to manage work and contract costs.

In addition, the contractor shall prepare a statement indicating that this WA is a continuation of WA 0-90. The workplan shall explain that collection, use and analysis of data in this work assignment will be identical to the procedures described in the SQAPP completed under Task 0 of WA 0-90.

This task also includes monthly progress and financial reports which are to be submitted pursuant to Attachment 2 of the contract. The monthly progress report shall indicate, in a separate QA section, whether significant QA issues have been identified and how they are being resolved. Monthly financial reports must include a table with the invoice LOE and costs broken out by the tasks in this WA. The contractor shall immediately notify the CLCOR and WACOR if any changes to the tasks involving the collection and analysis of the data occur and prepare a new supplemental to the SQAPP accordingly. Work on these tasks cannot proceed until the contractor receives notification of the new SQAPP approval from the CLCOR via e-mail.

The tasks under this work assignment do not require the acquisition of "off-site" facilities for conferences and meetings as defined in the IPN 12-05 and the events associated with this work assignment are not covered by EPA Order 1900.3 and do not require EPA Form 5170.

The contractor shall immediately alert the WACOR to any anticipated event under the work assignment which may result in incurring an estimated \$20,000 or more cost, funded by EPA, specific to that event, meeting, training, etc. Those costs would include travel of both prime and consultant personnel, planning and facilitation costs, AV and rental of venue costs, etc. The EPA WACOR will then prepare approval internal paperwork for the event and will advise the contractor when appropriate signatures have been obtained. At that point, effort can proceed for the event. If the event is being sponsored by another EPA organization, the organization providing the planning is responsible for the approval.

Task 1: UIC Permit Application Review (PWS Area: 4, 4.3, 8, 8.3)

The contractor shall evaluate (approximately 5) UIC Permit Applications submitted to US EPA Region 9 for Class I, II, III, V, or VI injection wells. The contractor shall evaluate the applications for administrative and/or technical completeness as noted below:

Subtask 1.1: Administrative Completeness

(a) administrative completeness per the requirements of 40 CFR part 144, (b) adherence to the minimum federal regulatory permit requirements standards at 40 CFR 144, 145, 146, and 147, (c) identification of any substantive issues of concern for the proposed construction and operation of the injection wells, and (d) overall accuracy and clarity of the application (i.e. any data gaps).

The contractor shall prepare a summary report (approximately 10 pages) of the proposed injection application/project with a determination of administrative completeness and a preliminary assessment of key issues to be addressed in the technical review phase. If the application is incomplete, the contractor shall include in the report a list of outstanding items necessary to make the application complete. The contractor shall submit the draft summary report to the EPA WACOR for review and comment. Upon receipt of comments from the EPA WACOR, the contractor shall finalize the summary report. If the contractor determines that the permit application is deficient, the contractor will evaluate subsequent submittals as needed for administrative completeness until the application is deemed administratively complete.

Subtask 1.2: Technical Review Analysis

(a) analysis of any well log data and testing results submitted by permit operators, (b) an evaluation of local and regional geology, including receiving formation and confining zone characteristics, (c) area of review (AoR) determinations and zone of endangering influence calculations, (d) recommendations for any corrective action required at existing wells within the AOR, (e) identifications of technical terms and conditions to be imposed in the draft permit – operational, monitoring, testing, reporting, etc., (f) evaluation of plugging and abandonment plans and acceptability of financial assurance, and (g) review and evaluation of any and all other applicable attachment(s) in the application.

The contractor shall submit the draft permit analysis report (approximately 20 pages) to the EPA WACOR for review and comment. The contractor shall include in the report an itemized list of additional information needed to clarify, modify, or supplement the application materials to address technical deficiencies. Upon receipt of comments from the EPA WACOR, the contractor shall finalize the report. If the contractor or EPA determines deficiencies in the technical review analysis, the contractor may be asked to evaluate subsequent submittals as needed until the permit application is technically sufficient.

Task 2: Permit Process Support (PWS Area: 4, 4.3, 8, 8.3)

The contractor shall provide support to approximately three (3) proposed UIC permit action for Class I, II, III, V, or VI injection wells. The contractor may be requested to develop some or all of the following subtasks:

Subtask 2.1: Statement of Basis/Fact Sheet

The contractor shall prepare a statement of basis/fact sheet document for proposed UIC permit actions. The statement of basis/fact sheet shall adhere to the requirements outlined in 40 CFR 124.7 and 124.8 and shall briefly set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. It is anticipated that the statement of basis or fact sheet shall be approximately 4-8 pages in length, and shall be developed for the purpose of explaining to the public the rationale for EPA's proposal to issue the specific permit as drafted. The contractor shall submit the statement of basis/fact sheet to the EPA WACOR for review and comment. Upon the receipt of comments by the EPA WACOR, the contractor shall finalize the document.

Subtask 2.2: Public Notification Document Development

The contractor shall prepare public notification (PN) documents, regarding the proposed UIC Permit. The public notification document shall be prepared in accordance with guidance provided by the EPA WACOR. It is anticipated that each document shall be approximately 1-3 pages in length. The contractor shall submit a draft of the public notification document to the EPA WACOR for review and comment. Upon the receipt of comments, the contractor shall finalize the document.

Subtask 2.3: Public Meetings Hearings Support, and/or Permit Appeals

The contractor shall develop at the direction of the EPA WACOR support material(s) for EPA to use at up to two public informational meetings, hearings, or permit appeal processes. Contractor may also be asked to participate at a public informational meeting, public hearing(s), and/or permit appeal process(es).

Subtask 2.4: Public Comment Review and Response to Comments Development

The contractor shall review public comments submitted, or a specific portion of them, and prepare a response to comments document, summarizing comments received, responding to comments submitted and specify any recommended changes to the draft permit and the reason for change, as described in 40 CFR 124.17. The format to be used will be provided by the EPA WACOR. The contractor will use, to the extent available as provided by the EPA WACOR, as appropriate, standard EPA Region 9 responses to common issues/comments. If commenters raise significant policy issues, the contractor will identify those with notation in the draft response to comments document. EPA Region 9, will take the lead from that point to resolve those issues with the commenter(s) and then provide guidance to the contractor regarding the approach to be taken in finalizing a response to the particular issues raised. As necessary, and prior to the delivery of the final response to comments document, the contractor will contact the EPA WACOR where guidance is needed regarding the approach to be taken in addressing certain comments in the response to comments document. The contractor shall submit a draft of the response to comments document to the EPA WACOR, for review and comment. Upon the receipt of comments, the contractor shall finalize the document.

Task 3: Permit Implementation Support (PWS Area: 2, 2.2, 8, 8.3)

The contractor shall provide support once a permit is issued, including review of drilling plans, logs, pressure transient tests and other technical submittals as required by the terms and conditions of the permit. We anticipate this task will take up to 10 hours per month.

Task 4: Special Studies and Project Technical Reviews (PWS Area: 2, 2.1, 2.2, 8, 8.3)

The contractor shall develop 8 - 10 special studies and/or project technical reviews as requested and detailed by the EPA WACOR through written technical direction. These studies or reviews will pertain to protection of USDWs or compliance with the Permit under the Safe Drinking Water Act. For these special studies or project technical reviews, the contractor shall prepare a draft report or technical memorandum (typically 5-10 pages length) for each study/review performed, summarizing the results of the review and recommendations for EPA or Navajo Nation EPA consideration, and opportunity to review and comment. The contractor will incorporate any comments from EPA and/or Navajo Nation EPA and will provide a final draft of each study or review to the EPA WACOR.

Task 5: Consultation Support (PWS Area: 2, 4, 8)

Upon the receipt of written technical direction by the EPA WACOR, the contractor will make one (1) staff person available to provide consultation support for: a) evaluations and discussions regarding permit reviews or testing, b) special projects, c) drafting permits, and permit appeal processes. For planning purposes, technical support shall be required for approximately eight (8) to sixteen (16) hours per month. Contractor will provide a summary of activities provided under this task as a part of the monthly progress report. At a minimum the summary will include: 1) hours utilized, 2) date of consultation, 3) key points discussed, and 4) any follow-up actions identified per the consultation.

IV. SCHEDULE OF DELIVERABLES:

TASK No.	DELIVERABLE	DATE DUE TO EPA
0	Work Plan, Monthly Progress and Financial Reports	Per Contract Requirements
1	UIC Permit Application Support	
1.1	Permit Application Administrative Completeness Report	Initial draft within 3 weeks
1.2	Technical Review Analysis	Initial draft within 8 weeks
2	Permit Process Report	

2.1	Statement of Basis	Initial draft within 2 weeks
2.2	Public Notification Document Development	Concurrent with submittal of statement of basis
2.3	Public Meetings/Hearings Support/Permit Appeal	2 - 4 weeks prior to public hearing or 1 -2 weeks from assignment.
2.4	Response to Comments Document Development	Within 4 weeks of delivery of public comments
3	Permit Implementation Support	Within 1-4 weeks of assignment, depending on complexity.
4	Special Studies/Technical Reviews	Within 1-6 weeks of assignment, depending on complexity
5	Consultation Support	Summary of consultation should be noted in the monthly progress report as noted in Task 5 above.

V. MISCELLANEOUS

Software Application Files and Accessibility

Software Application files, if delivered to the Government, shall conform to the requirements relating to accessibility as detailed to the 1998 amendments to the Rehabilitation Act, particularly, but not limited to, § 1194.21 Software applications and operating systems and § 1194.22 Web-based intranet and internet information and applications. See: <http://www.section508.gov/>

Preferred text format: MS Word, 8.0 or higher (Office 2003 or higher)
Preferred presentation format: Power Point, Office 2003 or higher
Preferred graphics format: Each graphic is an individual GIF file
Preferred portable format: Adobe Acrobat, version 6.0

VI. QUALITY ASSURANCE SURVEILLANCE PLAN

All task(s) identified in the performance work statement above are subject to review and approval by the EPA WACOR based on the general guidelines of the contract quality assurance surveillance plan regarding: Programmatic, cost control, timeliness/deliverables, and document development standards. Additional project specific quality assurance surveillance plan requirements are identified below.

<u>Performance Requirements</u>	<u>Performance Standards</u>	<u>Surveillance Methods</u>
Performance Standards are applicable to all PWS requirements and will be utilized to determine eligibility for Award Term Options.		
Programmatic Standard: Outputs are based on best available information and resources; Documentation of sources used, not used, and limitations of available data; Description of methodological choices made both conceptually and in data selection. Assumptions utilized in environmental planning and applying engineering principles are clearly documented.	No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.	EPA will review all products for conformance with the requirements of the SDWA Amendments, Clean Water Act and other related mandates, including Small Business Regulatory Enforcement Fairness Act 1996 (SBREFA) and Unfunded Mandates Reform Act of 1995 (UMRA).
Cost Control Standard:	The contractor shall manage	The EPA CL COR will

<p>Implementation of cost control system to monitor and track project status, that indicate level of budget utilized and forecast remaining budget needs to complete project. The contractor shall notify project COR immediately in cases where issues impact project cost are identified. The contractor shall provide a risk management strategy that identifies specific project element(s) that adversely impact proposed work plan. The risk management strategy shall present impacts if course is continued without mitigation, and solutions to resolve the issue(s). The risk Management Strategy shall consider process, schedule, prioritization, and cost benefit analysis.</p>	<p>costs to the level of the approved ceiling on each individual WA. The contractor shall notify the EPA WACOR, CL COR, and CO when 75% of the approved funding ceiling for any particular WA is reached. If a contractor fails to manage and control cost, any resultant overrun cannot exceed the total contract obligation for that period.</p>	<p>routinely discuss the work progress and contract level and individual task order expenditures with the Project Manager. The WACOR will maintain regular contact with the Contractor's designated task order manager/project manager to discuss task order progress and expenditures and will review and verify expenditures and technical progress before invoice payments are authorized.</p>
<p>Schedule Standard: Services and deliverables shall be in accordance with schedules stated in each task order. Unless amended or modified by an approved EPA action, a deliverable that is received 7-days past the due date, will be considered unsatisfactory performance..</p>	<p>No more than 15% of all deliverables per WA shall be submitted more than 3 work days past the due date.</p>	<p>EPA will closely monitor task milestone and deliverable schedules and review the Contract Monthly Progress Reports and any special reporting requirements to compare actual delivery dates to those approved in task orders. EPA will notify the contractor when it becomes apparent that an established schedule will not be met.</p>
<p>Document Development: Documents shall be technically and factually accurate, and suited to the intended audience. The draft version of a document shall meet a standard of no more than 2 typographical and/or grammatical errors per page and require no more than two editorial revisions. Final documents must meet a standard of no more than 2 typographical and/or grammatical errors per document.</p>	<p>No more than 15% of deliverables and work products for any WA furnished to EPA for review by CL COR/WACOR and QAO shall require revisions to meet the requirements of the QMP and QAPP for the WA.</p>	<p>The WAC will review drafts to assess technical accuracy and editorial quality. The WACOR will identify all inaccuracies and needed edits and corrections to the Contractor in the initial review of draft documents</p>